

# Federal Aviation Administration Regulatory Standards Division AMA-200

Quality Manual QMS 200



Document #
QMS 200

Revision #21

Title:

**AMA - 200 Quality Manual** 

Page 2 of 82

# **AMA-200 QUALITY MANUAL**

# **QMS Documentation**

AMA-200 policies, procedures, work instructions, and quality records are formally documented and controlled. Quality Management System (QMS) documents are easily accessible and printable from the AMA-200 web site. http://www.academy.faa.gov/ama200/QMS.htm

| REVISION HISTORY |  |        |                |  |
|------------------|--|--------|----------------|--|
| Rev              | Description of Change  | Author | Effective Date |  |
| 0                | Original   | JLA    | 12/23/2003     |  |
| 1                | Added Records to Appendix 3 (AMA-220)  | JLA    | 01/06/2004     |  |
| 2                | Added Records to Appendix 3 (AMA-250)  | JLA    | 01/06/2004     |  |
| 3                | Added Records to Appendix 3 (AMA-230)  | JLA    | 01/13/2004     |  |
| 4                | Added Records to Appendix 3 (AMA-260)  | JLA    | 01/13/2004     |  |
| 5                | Typos  | JLA    | 01/14/2004     |  |
| 6                | Reformat Table of Contents   | JLA    | 01/14/2004     |  |
| 7                | Edit Typo's per Gap Analysis   | JLA    | 01/27/2004     |  |
| 8                | Include classroom Process in Section 7   | JLA    | 02/09/2004     |  |
| 9                | Update each Branch employee<br>Qualifications                                  | JLA    | 02/13/2004     |  |
| 10               | Include additional exclusions  | JLA    | 03/29/2004     |  |
| 11               | Clarified 7.4.1 to show AMA-200 must follow the process from AMQ               | JLA    | 03/30/2004     |  |
| 12               | Correct typo's, change Management flow chart, change number of QP221 to QP 208 | JLA    | 05/21/2004     |  |
| 13               | Include Production Records   | JLA    | 06/04/2004     |  |
| 14               | Training required within 30 days 6.2.2.2                                       | JLA    | 06/29/2004     |  |
| 15               | Control of Production Documents  | JLA    | 06/30/2004     |  |
| 16               | Update AMA-240 Records   | JLA    | 08/04/2004     |  |
| 17               | Typo's and revisions numbers   | JLA    | 09/13/2004     |  |
| 18               | Added classroom procedures to Branch Instructions                              | JLA    | 12/07/2004     |  |



| 19 | Change retention of Print requests in AMA-250          | JLA | 06/13/2005 |
|----|--|-----|------------|
| 20 | Updated Audit schedule, removed repetitive definitions | RDB | 10/17/2005 |
| 21 | Minor revision to all sections of manual               | RDB | 04/07/06   |
|    |  |     |            |

| REFERENCE DOCUMENTS            |   |  |
|--------------------------------|---|--|
| Document Number Document Title |   |  |
| N/A                            | All Documents are listed in the AMA-200 Master List of QMS Documents, Appendix 1. |  |

#### **PREFACE**

AMA-200 is a FAA Academy organization responsible for ensuring standard, quality training in the application of national certification and surveillance programs, policies, and procedures.

AMA-200, is an Academy organization tasked to design, develop and manage training in job tasks used by field inspectors of the Federal Aviation Administration, Flight Standards Service and the Aircraft Certification Service. AMA-200 is located at the Mike Monroney Aeronautical Center, in Oklahoma City, Oklahoma. The AMA-200 organization embraces partnering between management and employees to achieve the highest level of quality.

The AMA-200 organization is currently composed of five product lines: Aircraft Certification Branch AMA-220, Commercial Transportation Operations Branch AMA-230, Air Transportation Operations Branch AMA-240, Airworthiness Branch AMA-250 and the Contracts and Program Administration Branch AMA-260. The initial deployment and ISO registration efforts of the AMA-200 Quality Management System will include all of the product lines.

The Aircraft Certificate Branch AMA-220, develops, maintains and provides standardized, timely, technical training for the Aircraft Certification Service. This is a customer driven program for the use of Aircraft Certification personnel in support of their job functions.

The Commercial Transportation Operations Branch AMA-230, develops, maintains and provides standardized, timely, technical training for the Flight Standards Service. These are job centered training processes by which air carrier/general aviation inspector, determines if aircraft and airmen meet their certification standards and are found to be



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 4 of 82

acceptable for use in passenger or cargo service by an airline certificated in the United States or the private transport in general aviation.

The Air Transportation Operations Branch AMA-240, develops, maintains and provides technical training for the Flight Standards Service, in air carrier certification and surveillance processes.

The Airworthiness Branch AMA-250, develops, maintains and provides training of Airworthiness Inspectors for the Flight Standards Service in air carrier certification, surveillance and evaluation processes, along with the general aviation certification, surveillance and evaluation process.

The Contracts and Program Administration Branch AMA-260, provides services for the Flight Standards Service and Aircraft Certification Service, that include out of agency training, student scheduling, contract administration and simulator maintenance.

"In order for the Regulatory Standards Division (AMA-200) to maintain its position as the world's aviation training leader, it is essential that we consistently meet or exceed our customers' requirements and expectations for the quality, performance, timeliness, and cost of the products and services we provide.

This manual defines AMA-200 policies that reflect the requirements of ISO 9001:2000, American National Standard Quality Management Systems Requirements. These policies ensure that we consistently meet the quality and performance requirements of customers in a timely and cost effective manner.

I personally affirm my commitment to enhancing the AMA-200 Quality Management System through the implementation of ISO 9001. I fully support the provisions of this manual and solicit the active partnership of all AMA-200 personnel in its implementation throughout our organization."

David C. Long, AMA-200 Acting Manager

#### **AMA-200 Mission Statement**

The Regulatory Standards Division will promote aviation safety by providing:

The highest quality, most cost-effective training, with advanced delivery methods and technically qualified instructors in a

state-of-the-art learning environment.

A standardized source of technical assistance, subject matter expertise, and training development.

AMA-200 Vision Statement



# **Regulatory Standards Division**

Document #
QMS 200

Revision

#21

AMA - 200 Quality Manual

Page 5 of 82

The Regulatory Standards Division will satisfy our customer needs with the Highest quality training in the most cost effective manner.

# **TABLE OF CONTENTS**

| AMA-200 QUALITY MANUAL  | 2  |
|---|----|
| QMS Documentation   | 2  |
| PREFACE   | 3  |
| TABLE OF CONTENTS   | 5  |
| 1. introduction   | 12 |
| 1.1 Scope (ISO9001:2000 Ref. 4.2.2 )                            | 12 |
| 1.2 Purpose (ISO9001:2000 Ref. 4.1 & 4.2.1c,d)                  |    |
| 1.3 Authority   |    |
| 1.4 Issue of the Manual (ISO9001:2000 Ref. 4.2.3d,g)            |    |
| 1.5 Amendments  |    |
| 1.6 Manual Change Request                                       |    |
| 1.7 Internal Audit  |    |
| 1.8 Review  |    |
| 1.9 Determining Customer Satisfaction (ISO9001:2000 Ref. 8.2.1) |    |
| 2. Exclusions   |    |
| 3. Terms and DefinitionS  |    |
| 4. Quality Management   |    |
| 4.1 General Requirements  |    |
| 4.2 Documentation Requirements                                  |    |
| 4.2.1 General   |    |
| 4.2.2 Quality Manual  |    |
| 4.2.3 Control of Documents                                      |    |
| 4.2.4 Control of Records  |    |
| 5. Management Responsibility                                    |    |
| 5.1 Management Commitment                                       |    |
| 5.1.1 Quality Policy and Objectives                             |    |
| 5.2 Quality Policy  | 23 |
| 5.2.1 Consistency of Quality Policy                             |    |



# **Regulatory Standards Division**

Document # QMS 200

**Revision** 

#21

AMA - 200 Quality Manual

Page 6 of 82

|            | 5.3  | Planning   | 23   |
|------------|--|--|--|
|            | 5.3.1  |  | 23   |
|            | 5.3.   | 2 Quality Management System Planning   | 24   |
|            | 5.4  | Responsibility, Authority, and Communication   | 24   |
|            | 5.4.   |  |  |
|            | 5.4.   |  |  |
|            | 5.4.   |  |  |
|            | 5.5  | Management Review  | 27   |
|            | 5.5.   | 1 General - Leadership Team Review   |  |
|            | 5.5.   |  |  |
| 6.         | Res  | ource management   | 28   |
|            | 6.1  |  | 28   |
|            | 6.1.   |  |  |
|            |  | • • •  |  |
|            | <b>6.2</b> 6.2.  |  | 29   |
|            |  |  |  |
|            | 6.3  | Infrastructure   | 30   |
|            | 6.3.   |  |  |
|            |  | ninistration shall determine, provide, and maintain the infrastructure needed to achieve | •  |
|            | conf   | formity to AMA-200 product requirements  | 30   |
|            |  |  |  |
|            | 6.4  | Work Environment   | 30   |
|            |  | Work Environment_  1 Work Environment, Management and Employee Responsibility            |  |
| <i>7</i> . | 6.4.   | 1 Work Environment, Management and Employee Responsibility                               | 30   |
| <i>7</i> . | 6.4.<br><b>Pro</b>   | 1 Work Environment, Management and Employee Responsibility                               | 30<br>31   |
| <i>7</i> . | 6.4. <i>Proc</i>   | 1 Work Environment, Management and Employee Responsibility                               | 30<br>31<br>31   |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1.  | 1 Work Environment, Management and Employee Responsibility                               | 30<br>31<br>31<br>31   |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b>   | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31   |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2.                                    | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31   |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2. 7.2.                               | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31<br>31   |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2. 7.2. 7.2.                          | Work Environment, Management and Employee Responsibility                                 | 31313131313131313131313131313131313131   |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2. 7.2. 7.2.                          | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31<br>32<br>32   |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2. 7.2. 7.2. 7.2. <b>7.3</b>          | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31<br>32<br>32<br>32                                     |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2. 7.2. 7.2. 7.2. 7.3 7.3.            | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31<br>32<br>32<br>33<br>33                               |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2. 7.2. 7.2. 7.3 7.3. 7.3.            | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31<br>32<br>32<br>33<br>33<br>34                         |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2. 7.2. 7.2. 7.3. 7.3. 7.3.           | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31<br>32<br>32<br>33<br>33<br>34<br>35                   |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2. 7.2. 7.2. 7.2. 7.3 7.3. 7.3. 7.3.  | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31<br>32<br>32<br>32<br>33<br>34<br>35<br>35             |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2. 7.2. 7.2. 7.3. 7.3. 7.3. 7.3. 7.3. | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31<br>32<br>32<br>33<br>33<br>35<br>35<br>35             |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2. 7.2. 7.2. 7.3. 7.3. 7.3. 7.3. 7.3. | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31<br>32<br>32<br>32<br>33<br>34<br>35<br>35<br>35<br>35 |
| <i>7</i> . | 6.4. <b>Proo 7.1</b> 7.1. <b>7.2</b> 7.2. 7.2. 7.2. 7.3. 7.3. 7.3. 7.3. 7.3. | Work Environment, Management and Employee Responsibility                                 | 30<br>31<br>31<br>31<br>31<br>32<br>32<br>33<br>34<br>35<br>35<br>36<br>36       |



# **Regulatory Standards Division**

Document # QMS 200

Revision

#21

AMA - 200 Quality Manual

Page 7 of 82

| 7  | 7.4 Pur     | chasing  | <b>36</b> |
|----|-------------|--|-----------|
|    | 7.4.1       | Purchasing Process As a part of the Federal Aviation Administration (FAA), AMA-20          | 00        |
|    | is suppor   | rted in its procurement activities by the FAA procurement process that operates externall  | y         |
|    | to AMA-     | -200 and in which AMA-200 must follow that external procurement process. AMA-200           | •         |
|    |             | s with AMQ (Office of Acquisition Services) through the process identified below. The      | ;         |
|    |             | and method for purchasing items and from whom they must be purchased is mandated by        |           |
|    |             |  | 36        |
|    | 7.4.2       | Purchasing Information   | 37        |
|    | 7.4.3       | Verification of Purchased Product  |           |
| 7  | 7.5 Pro     | duction and Service Provision  | 37        |
| •  | 7.5.1       | See exclusions. AMA-200 does not provide any warranty service to products it produce       |           |
|    | , , , , , , | 37   |           |
|    | 7.5.2       | See exclusions.  | 37        |
|    | 7.5.3       | Identification and Traceability: All products are identified by either course and class    |           |
|    | number o    | or contract number. For FAA personnel traceability of the product is maintained in CPM     | 1IS       |
|    | and non-    | FAA personnel records are maintained for two years and then disposed through shreddir      | ıg.       |
|    | AMA-20      | 00 identifies product status as defined in the Production Plan QP 214                      | 37        |
|    | 7.5.4       | See exclusions. Customer Property: AMA-200 does not use or control customer                |           |
|    | property.   | . 38   |           |
|    | 7.5.5       | Preservation of Product: AMA-200 shall ensure the preservation of product and its          |           |
|    |             | ent parts by storing electronic products on the "W" drive of the LAN and paper products    |           |
|    | appropria   | ate controlled storage or file areas   | 38        |
| 7  | 7.6 Cor     | ntrol of Monitoring and Measuring Devices  | 38        |
| 8. |             |  | 38        |
| 8  | 3.1 Ger     | neral  | 38        |
|    | 8.1.1       |  | 38        |
|    | 8.1.2       | The Management Representative shall identify the need for statistical techniques and       |           |
|    | establish   | methods and instructions for their application. The selection of the appropriate statistic | al        |
|    |             | individual processes is established through quality planning.                              |           |
| 8  | 3.2 Mor     | nitoring and Measurement   | 38        |
|    |             | 8  | 38        |
|    | 8.2.2       | Internal Audit   |           |
|    | 8.2.3       | Monitoring and Measurement of Processes  | 41        |
|    | 8.2.4       |  | 42        |
| 5  | 8.3 Cor     | -  | 42        |
| •  | 8.3.1       | Employee Reporting of Nonconformities  |           |
|    | 8.3.2       |  | 42        |
|    |             |  |           |
|    |             |  | 43        |
| 8  |             |  | 43        |
|    | 8.5.1       | Continual improvement Policy and Responsibilities  | 43        |



Document #
QMS 200

**Revision** 

#21

Title: AMA - 200 Quality Manual Page 8 of 82 8.5.2 Corrective Action \_\_\_\_\_\_ 44 8.5.3 Preventive Action \_\_\_\_\_\_ 44 Control of the Improvement Process 45 8.5.4 8.5.5 Procedures Implementing Improvement\_\_\_\_\_\_\_45 Aircraft Certification Branch (AMA-220) \_\_\_\_\_\_ 46 9.1 Introduction 46 9.1.1 Scope 46 9.1.2 9.1.3 Authority\_\_\_\_\_\_\_46 9.1.4 Responsibilities\_\_\_\_\_\_\_\_46 9.1.5 Review 46 9.2 9.3 Quality Management System\_\_\_\_\_\_ 47 9.3.1 General Control of Documents and Records \_\_\_\_\_\_ 47 9.3.2 9.3.3 Quality Policy \_\_\_\_\_\_ 47 9.3.4 Planning \_\_\_\_\_\_47 9.3.5 Internal Communications 48 9.3.6 Management Review \_\_\_\_\_\_ 48 9.4 Resource Management 48 9.4.1 General \_\_\_\_\_\_ 48 9.4.2 Human Resources \_\_\_\_\_\_48 9.4.3 Branch Training Curriculum\_\_\_\_\_\_49 9.5 **Product Realization** 49 9.5.1 Planning of Product Realization \_\_\_\_\_ 49 Requests for new products or major changes to existing products shall be accomplished 9.5.2 in accordance with Section 7.3 of this manual. \_\_\_\_\_\_ 49 9.6 Measurement, Analysis, and Improvement \_\_\_\_\_\_ 49 Customer Satisfaction\_\_\_\_\_\_\_49 9.6.1 9.6.2 Internal Audits \_\_\_\_\_ 50 Control of Nonconforming Product \_\_\_\_\_\_\_50 9.6.3 9.7 Aircraft Certification Documentation 50 *10*. Commercial Transportation Operations Branch (AMA-230) \_\_\_\_\_\_ 50 10.1 Introduction\_\_\_\_\_\_50 10.1.1 Scope 50 10.1.2 Purpose 50 10.1.3 Authority Quality Management System 51 10.2.1 General 51



Document # QMS 200

**Revision** 

#21

Title: AMA - 200 Quality Manual

Page 9 of 82

| 10.2.2    | Control of Documents and Records   |
|-----------|--|
| 10.3 Ma   | nnagement Responsibility   |
| 10.3.1    | Quality Policy   |
| 10.3.2    | Planning   |
| 10.3.3    | Internal Communications  |
| 10.4 Re   | source Management  |
| 10.4.1    | General  |
| 10.4.2    | Human Resources  |
| 10.4.3    |  |
| 10.4.4    | Currency for Pilots shall be maintained in accordance with FAA Order 4040.9 and en-    |
| route cu  | rrency shall be maintained in accordance with FAA Order 8000.75.                       |
| 10.5 Pro  | oduct Realization  |
| Planning  | g of Product Realization   |
|           | The Branch Manager is responsible for the quality control planning for current AMA-230 |
| products  | S  |
| 10.6 Me   | easurement, Analysis, and Improvement  |
| 10.6.1    |  |
| 10.6.2    |  |
| 10.6.3    | Control of Nonconforming Product   |
| 10.7 AN   | /IA-230 Documentation  |
| 11. Air T | ransportation Operations branch (AMA-240)  |
| 11.1 Int  | roduction  |
| 11.1.1    | Scope  |
| 11.1.2    | Purpose  |
| 11.1.3    | Authority  |
| 11.2 Qu   | ality Management System  |
|           | General  |
| 11.2.2    | Control of Documents and Records   |
| 11.3 Ma   | anagement Responsibility   |
| 11.3.1    | Quality Policy   |
| 11.3.2    | Planning   |
| 11.3.3    | Internal Communications  |
| 11.3.4    | Management Review  |
| 11.4 Re   | source Management  |
| 11.4.1    | General  |
| 11.4.2    | Human Resources  |
| 11.4.3    | Branch Training Curriculum   |
| 11.4.4    | Currency for Pilots shall be maintained in accordance with FAA order 4040.9 and en-    |
| route cu  | rrency shall be maintained in accordance with FAA Order 8000.75.                       |



# **Regulatory Standards Division**

Document # QMS 200

**Revision** 

#21

AMA - 200 Quality Manual

Page 10 of 82

| 12.1 Introduction       60         12.1.1 Scope       60         12.1.2 Purpose       60         12.1.3 Authority       61         12.2 Terms, Definitions and Acronyms       61         12.3 Quality Management System       61         12.3.1 General       61         12.3.2 Control of Documents and Records       61         12.4 Management Responsibility       62         12.4.1 Quality Policy       62         12.4.2 Planning       62         12.4.3 Internal Communications       62         12.4.4 Management Review       62         12.5.1 General       63         12.5.2 Human Resources       63         12.5.3 Branch Training Curriculum       63         12.5.4 En-route currency shall be maintained in accordance with FAA Order 8000.75       64         12.6 Product Realization       64         12.6.1 Planning of Product Realization       64         12.6.2 Requests for new products or major changes to existing products shall be accomplished  | 11.5 Pro  | duct Realization  | 59  |
|---|-----------|---|-----|
| 11.5.2   Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual  | 11.5.1    |   | 59  |
| in accordance with section 7 of this manual   | 11.5.2    | Requests for new products or major changes to existing products shall be accomplished |     |
| 11.5.3   Classroom processes shall be accomplished following Classroom Instruction Procedures QP 218. 59   11.5.4   The Branch Manager is responsible for the quality control planning for current branch products. 59   11.6.1   Customer Satisfaction   | in accord | lance with section 7 of this manual   |     |
| 11.5.4         The Branch Manager is responsible for the quality control planning for current branch products. 59           11.6         Measurement, Analysis, and Improvement         59           11.6.1         Customer Satisfaction         59           11.6.2         Internal Audits         59           11.6.3         Control of Nonconforming Product         60           11.7         AMA-240 Documentation         60           12.         AirWorthiness Branch (AMA-250)         66           12.1         Introduction         60           12.1.1         Scope         60           12.1.2         Purpose         60           12.1.3         Authority         61           12.2         Terms, Definitions and Acronyms         61           12.3         Quality Management System         61           12.3.1         General         61           12.3.2         Control of Documents and Records         61           12.4         Management Responsibility         62           12.4.1         Quality Policy         62           12.4.2         Planning         62           12.4.3         Internal Communications         62           12.4.4         Management Review         62   |           | Classroom processes shall be accomplished following Classroom Instruction Procedure   | S   |
| 11.6   Measurement, Analysis, and Improvement   59     11.6.1   Customer Satisfaction   59     11.6.2   Internal Audits   59     11.6.3   Control of Nonconforming Product   60     11.7   AMA-240   Documentation   60     12.   AirWorthiness Branch (AMA-250)   60     12.1   Introduction   60     12.1.1   Scope   60     12.1.2   Purpose   60     12.1.3   Authority   61     12.2   Terms, Definitions and Acronyms   61     12.3   Quality Management System   61     12.3.1   General   61     12.3.2   Control of Documents and Records   61     12.4   Management Responsibility   62     12.4.1   Quality Policy   62     12.4.2   Planning   62     12.4.3   Internal Communications   62     12.4.4   Management Review   62     12.5   Resource Management   63     12.5.1   General   63     12.5.2   Human Resources   63     12.5.3   Branch Training Curriculum   63     12.5.4   En-route currency shall be maintained in accordance with FAA Order 8000.75   64     12.6.1   Planning of Product Realization   64     12.6.2   Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual   64     12.6.3   Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218   64     12.6.4   The Branch Manager is responsible for the quality control planning for current branch | QP 218.   | 59  |     |
| 11.6         Measurement, Analysis, and Improvement         59           11.6.1         Customer Satisfaction         59           11.6.2         Internal Audits         59           11.6.3         Control of Nonconforming Product         60           11.7         AMA-240 Documentation         60           12.         AirWorthiness Branch (AMA-250)         60           12.1         Introduction         60           12.1.1         Scope         60           12.1.2         Purpose         60           12.1.3         Authority         61           12.2         Terms, Definitions and Acronyms         61           12.3         Quality Management System         61           12.3.1         General         61           12.3.2         Control of Documents and Records         61           12.4         Management Responsibility         62           12.4.1         Quality Policy         62           12.4.2         Planning         62           12.4.3         Internal Communications         62           12.5.1         General         63           12.5.2         Human Resources         63           12.5.3         Branch Training C  | 11.5.4    | The Branch Manager is responsible for the quality control planning for current branch |     |
| 11.6.1       Customer Satisfaction       55         11.6.2       Internal Audits       55         11.6.3       Control of Nonconforming Product       60         11.7       AMA-240 Documentation       60         12.       AirWorthiness Branch (AMA-250)       60         12.1       Introduction       60         12.1.1       Scope       60         12.1.2       Purpose       60         12.1.3       Authority       61         12.2       Terms, Definitions and Acronyms       61         12.3       Quality Management System       61         12.3.1       General       61         12.3.2       Control of Documents and Records       61         12.4       Management Responsibility       62         12.4.1       Quality Policy       62         12.4.2       Planning       62         12.4.3       Internal Communications       62         12.4.4       Management Review       62         12.5.1       General       63         12.5.2       Human Resources       63         12.5.3       Branch Training Curriculum       63         12.5.4       En-route currency shall be maintained in accordan  | products  | . 59  |     |
| 11.6.1       Customer Satisfaction       55         11.6.2       Internal Audits       55         11.6.3       Control of Nonconforming Product       60         11.7       AMA-240 Documentation       60         12.       AirWorthiness Branch (AMA-250)       60         12.1       Introduction       60         12.1.1       Scope       60         12.1.2       Purpose       60         12.1.3       Authority       61         12.2       Terms, Definitions and Acronyms       61         12.3       Quality Management System       61         12.3.1       General       61         12.3.2       Control of Documents and Records       61         12.4       Management Responsibility       62         12.4.1       Quality Policy       62         12.4.2       Planning       62         12.4.3       Internal Communications       62         12.4.4       Management Review       62         12.5.1       General       63         12.5.2       Human Resources       63         12.5.3       Branch Training Curriculum       63         12.5.4       En-route currency shall be maintained in accordan  | 11.6 Me   | asurement Analysis and Improvement  | 59  |
| 11.6.2   Internal Audits  |           |   |     |
| 11.6.3 Control of Nonconforming Product       60         11.7 AMA-240 Documentation       60         12. AirWorthiness Branch (AMA-250)       60         12.1.1 Introduction       60         12.1.2 Purpose       60         12.1.3 Authority       61         12.2 Terms, Definitions and Acronyms       61         12.3 Quality Management System       61         12.3.1 General       61         12.3.2 Control of Documents and Records       61         12.4 Management Responsibility       62         12.4.1 Quality Policy       62         12.4.2 Planning       62         12.4.3 Internal Communications       62         12.4.4 Management Review       62         12.5.1 General       63         12.5.2 Human Resources       63         12.5.3 Branch Training Curriculum       63         12.5.4 En-route currency shall be maintained in accordance with FAA Order 8000.75.       64         12.6 Product Realization       64         12.6.1 Planning of Product Realization       64         12.6.2 Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual       64         12.6.3 Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218.       <  |           |   |     |
| 11.7   AMA-240 Documentation  |           |   |     |
| 12.1   Introduction   |           | -   |     |
| 12.1 Introduction       60         12.1.1 Scope       60         12.1.2 Purpose       60         12.1.3 Authority       61         12.2 Terms, Definitions and Acronyms         61       12.3 Quality Management System       61         12.3.1 General       61         12.3.2 Control of Documents and Records       61         12.4 Management Responsibility       62         12.4.1 Quality Policy       62         12.4.2 Planning       62         12.4.3 Internal Communications       62         12.4.4 Management Review       62         12.5.1 General       63         12.5.2 Human Resources       63         12.5.3 Branch Training Curriculum       63         12.5.4 En-route currency shall be maintained in accordance with FAA Order 8000.75.       64         12.6.1 Planning of Product Realization       64         12.6.2 Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual       64         12.6.3 Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218.       64         12.6.4 The Branch Manager is responsible for the quality control planning for current branch   | 11.7 AW   | A-240 Documentation   | ðU  |
| 12.1.1       Scope       60         12.1.2       Purpose       60         12.1.3       Authority       61         12.2       Terms, Definitions and Acronyms       61         12.3       Quality Management System       61         12.3.1       General       61         12.3.2       Control of Documents and Records       61         12.4       Management Responsibility       62         12.4.1       Quality Policy       62         12.4.2       Planning       62         12.4.3       Internal Communications       62         12.4.4       Management Review       62         12.5.1       General       63         12.5.1       General       63         12.5.2       Human Resources       63         12.5.3       Branch Training Curriculum       63         12.5.4       En-route currency shall be maintained in accordance with FAA Order 8000.75.       64         12.6       Product Realization       64         12.6.1       Planning of Product Realization       64         12.6.2       Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual       64         12.6.3  | 12. AirWo | orthiness Branch (AMA-250)  | 60  |
| 12.1.1       Scope       60         12.1.2       Purpose       60         12.1.3       Authority       61         12.2       Terms, Definitions and Acronyms       61         12.3       Quality Management System       61         12.3.1       General       61         12.3.2       Control of Documents and Records       61         12.4       Management Responsibility       62         12.4.1       Quality Policy       62         12.4.2       Planning       62         12.4.3       Internal Communications       62         12.4.4       Management Review       62         12.5.1       General       63         12.5.1       General       63         12.5.2       Human Resources       63         12.5.3       Branch Training Curriculum       63         12.5.4       En-route currency shall be maintained in accordance with FAA Order 8000.75.       64         12.6       Product Realization       64         12.6.1       Planning of Product Realization       64         12.6.2       Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual       64         12.6.3  | 12.1 Int  | roduction   | 60  |
| 12.1.2       Purpose       60         12.1.3       Authority       61         12.2       Terms, Definitions and Acronyms       61         12.3       Quality Management System       61         12.3.1       General       61         12.3.2       Control of Documents and Records       61         12.4       Management Responsibility       62         12.4.1       Quality Policy       62         12.4.2       Planning       62         12.4.3       Internal Communications       62         12.4.4       Management Review       62         12.5.1       General       63         12.5.2       Human Resources       63         12.5.2       Human Resources       63         12.5.3       Branch Training Curriculum       63         12.5.4       En-route currency shall be maintained in accordance with FAA Order 8000.75.       64         12.6.1       Planning of Product Realization       64         12.6.2       Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual       64         12.6.3       Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218.       64         12.6.4<   |           |   |     |
| 12.1.3   Authority  | 12.1.2    |   |     |
| 12.2 Terms, Definitions and Acronyms         61           12.3 Quality Management System         61           12.3.1 General         61           12.3.2 Control of Documents and Records         61           12.4 Management Responsibility         62           12.4.1 Quality Policy         62           12.4.2 Planning         62           12.4.3 Internal Communications         62           12.4.4 Management Review         62           12.5.1 General         63           12.5.2 Human Resources         63           12.5.3 Branch Training Curriculum         63           12.5.4 En-route currency shall be maintained in accordance with FAA Order 8000.75.         64           12.6.1 Planning of Product Realization         64           12.6.2 Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual         64           12.6.3 Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218.         64           12.6.4 The Branch Manager is responsible for the quality control planning for current branch  |           |   |     |
| 12.3 Quality Management System6112.3.1General6112.3.2Control of Documents and Records6112.4Management Responsibility6212.4.1Quality Policy6212.4.2Planning6212.4.3Internal Communications6212.4.4Management Review6212.5.5Resource Management6312.5.1General6312.5.2Human Resources6312.5.3Branch Training Curriculum6312.5.4En-route currency shall be maintained in accordance with FAA Order 8000.75.6412.6.1Planning of Product Realization6412.6.2Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual6412.6.3Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218.6412.6.4The Branch Manager is responsible for the quality control planning for current branch  |           |   |     |
| 12.3.1 General  |           | •   |     |
| 12.3.2 Control of Documents and Records   |           |   |     |
| 12.4 Management Responsibility6212.4.1 Quality Policy6212.4.2 Planning6212.4.3 Internal Communications6212.4.4 Management Review6212.5 Resource Management6312.5.1 General6312.5.2 Human Resources6312.5.3 Branch Training Curriculum6312.5.4 En-route currency shall be maintained in accordance with FAA Order 8000.75.6412.6 Product Realization6412.6.1 Planning of Product Realization6412.6.2 Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual6412.6.3 Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218.6412.6.4 The Branch Manager is responsible for the quality control planning for current branch   |           |   |     |
| 12.4.1 Quality Policy   |           |   |     |
| 12.4.2 Planning   |           |   |     |
| 12.4.3 Internal Communications  |           |   |     |
| 12.5 Resource Management  12.5.1 General  12.5.2 Human Resources  12.5.3 Branch Training Curriculum  12.5.4 En-route currency shall be maintained in accordance with FAA Order 8000.75.  12.6 Product Realization  12.6.1 Planning of Product Realization  12.6.2 Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual  12.6.3 Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218. 64  12.6.4 The Branch Manager is responsible for the quality control planning for current branch  |           |   |     |
| 12.5 Resource Management6312.5.1 General6312.5.2 Human Resources6312.5.3 Branch Training Curriculum6312.5.4 En-route currency shall be maintained in accordance with FAA Order 8000.75.6412.6 Product Realization6412.6.1 Planning of Product Realization6412.6.2 Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual6412.6.3 Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218.6412.6.4 The Branch Manager is responsible for the quality control planning for current branch   |           |   |     |
| 12.5.1 General  | 12.4.4    | Management Review   | 52  |
| 12.5.1 General  | 12.5 Res  | source Management   | 63  |
| 12.5.3 Branch Training Curriculum   |           |   |     |
| 12.5.3 Branch Training Curriculum   | 12.5.2    | Human Resources   | 63  |
| 12.5.4 En-route currency shall be maintained in accordance with FAA Order 8000.75 64  12.6 Product Realization 64  12.6.1 Planning of Product Realization 64  12.6.2 Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual 64  12.6.3 Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218. 64  12.6.4 The Branch Manager is responsible for the quality control planning for current branch  | 12.5.3    |   |     |
| 12.6.1 Planning of Product Realization  | 12.5.4    | En-route currency shall be maintained in accordance with FAA Order 8000.75.           | 64  |
| 12.6.1 Planning of Product Realization  | 12.6 Pro  | duct Realization  | 64  |
| 12.6.2 Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual  |           | Planning of Product Realization   |     |
| in accordance with section 7 of this manual   |           | Requests for new products or major changes to existing products shall be accomplished |     |
| <ul> <li>12.6.3 Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218.</li> <li>64</li> <li>12.6.4 The Branch Manager is responsible for the quality control planning for current branch</li> </ul>  |           |   |     |
| QP 218. 64<br>12.6.4 The Branch Manager is responsible for the quality control planning for current branch  | 12.6.3    | Classroom processes shall be accomplished following Classroom Instructions Procedur   | es. |
| 12.6.4 The Branch Manager is responsible for the quality control planning for current branch  |           |   | -   |
|   | -         |   |     |
|   |           |   |     |



Document # QMS 200

**Revision** 

#21

Title: AMA - 200 Quality Manual

Page 11 of 82

|                  | easurement, Analysis, and Improvement   |            |
|------------------|---|------------|
| 12.7.1<br>12.7.2 | Customer Satisfaction   |            |
|                  | Internal AuditsControl of Nonconforming Product   |            |
|                  |   |            |
|                  | cumentation   |            |
| 13. Conti        | racts and Program Administration Branch AMA-260   | 65         |
| 13.1 Int         | roduction   | 65         |
| 13.1.1           | Scope   |            |
| 13.1.2           | Purpose   | 65         |
| 13.1.3           | Authority   | 66         |
| 13.2 Te          | rms, Definitions and Acronyms   | 66         |
| 13.3 Ou          | ality Management System   | 66         |
|                  | General   |            |
| 13.3.2           | Control of Documents and Records  | 67         |
|                  | nnagement Responsibility  |            |
| 13.4.1           | Quality Policy  |            |
| 13.4.2           | Planning  |            |
| 13.4.3           | Internal Communications   |            |
| 13.4.4           | Management Review   | 68         |
| 13.5 Re          | source Management   | 68         |
| 13.5.1           | General   |            |
| 13.5.2           | Human Resources   | 68         |
| 13.5.3           | AMA-260 Training Curriculum   | 68         |
| 13.6 Pro         | oduct Realization   | 69         |
| 13.6.1           | Planning of Product Realization   |            |
| 13.6.2           | Requests for new products or major changes to existing products shall be accomplished       | :d         |
|                  |   | 69         |
| 13.6.3 products  | The Branch Manager is responsible for the quality control planning for current branch s. 69 | ļ          |
| 13.7 Me          | easurement, Analysis, and Improvement   | 69         |
| 13.7.1           | Customer Satisfaction   |            |
| 13.7.2           | Internal Audits   | 69         |
| 13.7.3           | Control of Nonconforming Product  | _ 69       |
| 13.8 Do          | cumentation   | <b>7</b> 0 |
|                  | 1: MASTER LIST OF QMS DOCUMENTS   | 70         |
| APPENDIX         | 2: AMA-200 Document Control Index System  | _ 74       |
|                  | · · · · · · · · · · · · · · · · · · ·   |            |



Document #
QMS 200

Revision

#21

Page 12 of 82

Title: AMA - 200 Quality Manual

#### 1. INTRODUCTION

This Quality Manual (QM) outlines the policy of AMA-200 relating to the AMA-200 Quality Management System (QMS). The QMS is issued and controlled by AMA-200.

QMS Sections 3 through 8 generally align with ISO 9001:2000 Clauses 3 through 8. When applicable, QMS Section 1 will indicate the appropriate ISO clause or sub-clause in parentheses.

References to specific product lines are contained in the QMS beginning with section nine. Each section will contain product line specific policy and hyperlinks to related quality documents.

#### 1.1 Scope (ISO9001:2000 Ref. 4.2.2)

This Quality Manual applies to all products and personnel within the AMA-200. The AMA-200 QMS includes the following product lines:

- Aircraft Certification Branch (AMA-220) Section 9
- Commercial Transportation Branch (AMA-230) Section 10
- Air Transportation Operations Branch (AMA-240) Section 11
- Airworthiness Branch (AMA-250) Section 12
- Contracts and Program Administration Branch (AMA-260) Section 13

#### 1.2 Purpose (ISO9001:2000 Ref. 4.1 & 4.2.1c,d)

The primary purpose of the QMS is to document AMA-200's policies, procedures and document control systems. The QMS meets the minimum requirements of the ISO 9001:2000 Standard.

The QMS is the source of policies, procedures, and responsibilities that authorize creation of quality related activities and documentation.

This QM provides evidence to all customers and employees that AMA-200 is committed to establishing and maintaining acceptable levels of measurable Quality in its products.

Justified exclusions for AMA-200 QMS are found in Section 2.

#### 1.3 Authority

This QM is issued under the authority of the AMA-200 Manager.



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 13 of 82

## 1.4 Issue of the Manual (ISO9001:2000 Ref. 4.2.3d,g)

The Management Representative shall maintain the official copy of the QMS.

All QMS documents are available at the AMA-200 web site located at <a href="http://www.academy.faa.gov/ama200/qms.htm">http://www.academy.faa.gov/ama200/qms.htm</a>

Uncontrolled copies may be downloaded and printed from the web site. These copies will be current at the date of download, and will not be subject to amendment action. Printed copies will be watermarked "Uncontrolled Copy" in the footer.

This QM is current as of the date and revision status located on the revision history pages 2 and 3.

# 1.5 Amendments

The QMS will be revised as required. The AMA-200 Management Representative along with the Assistant Division Manager and Assigned Branch Managers shall approve all revisions.

# 1.6 Manual Change Request

All revision change requests will be made using the Document Change Request Form QF 210. Approvals and routing are indicated on the form.

#### 1.7 Internal Audit

The AMA-200 Internal Audit Program was developed utilizing the principles of Continuous Improvement to standardize the auditing process. The audit program has been developed to achieve a more productive and effective QMS.

#### 1.8 Review

The AMA-200 QMS will be reviewed at least annually by the AMA-200 Division Management Team to assure that current procedures conform to actual branch business practices.

# 1.9 Determining Customer Satisfaction (ISO9001:2000 Ref. 8.2.1)

The Management Representative and Branch Managers are responsible for assuring customer satisfaction following the guidance in Section 5, Section 7 and Section 8.

#### 2. EXCLUSIONS

Clause 7.5.1, Control of Service Provision: AMA-200 does not provide any warranty work for products it produces.



# **Regulatory Standards Division**

Document #
QMS 200

Revision

#21

**AMA - 200 Quality Manual** 

Page 14 of 82

Clause 7.5.2, Validation of processes for production and service provisions. AMA-200 does not produce any products that cannot be verified by subsequent monitoring or measurement.

Clause 7.5.4, Customer Property: AMA-200 does not use or control customer property.

Clause 7.6, Control of monitoring and measuring devices, AMA-200 does not have monitoring and measuring devices for production.

# 3. TERMS AND DEFINITIONS

| Audit                        | A systematic independent documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.                             |
|------------------------------|---|
| Auditee                      | The person or organization being audited.   |
| Auditor                      | A person or group selected by an authoritative body to prepare and perform an audit.  |
| Continuous Improvement       | A recurring activity, at non-planned intervals, to increase the organization's ability to fulfill stated requirements.  |
| Corrective Action            | Measures taken to rectify conditions adverse to quality and to minimize recurrence.   |
| Customer                     | Recipient of AMA-200 services and products. The customer may be the ultimate consumer, user and beneficiary of the product. The customer may be internal or external to the AMA-200 Organization. |
| Document                     | Information and its support medium ie: procedure, work instruction, manual, or associated data in any media which is used to control the processes that affect the quality of the final product   |
| Inspection                   | Activities such as measuring, examining, testing, gauging one or more characteristics of a product or service and comparing these with specified requirements to determine conformity.            |
| Internal Audit Program (IAP) | Documented process by which an organization conducts audits on itself.  |



# **Regulatory Standards Division**

Document # QMS 200

Revision #21

Page 15 of 82

AMA - 200 Quality Manual

| Leadership Team    | Used interchangeably with the term Division Management Team (DMT), consists of the AMA-200/201 Managers, Branch Managers and Management Representative.   |
|--------------------|---|
| Metrics            | The method by which data is evaluated.  |
| Nonconformity      | Non-fulfillment of a requirement.   |
| Objective Evidence | Data supporting the existence or verity of something that has taken place. Can be obtained through observation, measurement, test, interview, or other means.   |
| Observation        | Evidence that an auditable element exists. It must not be contrary to documented requirements, but may warrant further qualification or improvement.  |
| Preventive Action  | Action to eliminate the cause of a potential nonconformity or other undesirable potential situation.  |
| Procedure          | The documented practices defining the who, what, where, and when of quality activities.   |
| Process            | Set of interrelated or interacting activities which transforms inputs to outputs.   |
| Product            | The result of activities or processes. A product can be tangible, intangible, or a combination thereof.   |
| Product Line Level | That portion of the AMA-200 QMS policy, procedure, and work instructions that relate uniquely to a specific product line.   |
| Project            | Unique process consisting of a set of coordinated and controlled activities with start and finish dates, undertaken to achieve an objective conforming to specific requirements, including the constraints of time, cost and resources. |
| Quality            | Degree to which a set of inherent characteristics fulfils requirements.   |
| Quality Assurance  | Part of quality management focused on providing confidence that quality requirements will be fulfilled.   |



Document #
QMS 200

Revision #21

Title:

AMA - 200 Quality Manual

Page 16 of 82

| Quality Management System (QMS) | Co-ordinated activities to direct and control an organization with regard to quality.                    |
|---------------------------------|--|
| Quality Policy                  | Overall intentions and directions of AMA-200 with regard to quality as formally expressed by management. |
| Record                          | Document stating the results achieved or providing evidence of activities performed.                     |
| System Level                    | AMA-200 QMS policy, procedure, and work instructions that relate to the quality organization.            |
| Work Instruction                | The detailed instructions for a stated process.  |

## 4. QUALITY MANAGEMENT

AMA-200 advocates the utilization of a process approach as a way to simultaneously assure regulatory compliance and raise the bar of aviation education beyond what is possible through regulatory compliance alone. A process based approach promotes the scrutiny of Academy systems, the processes within the systems, and how those systems interact with each other.

In an effort to improve and standardize its own processes, AMA-200 has endeavored to design and implement a QMS based on the minimum requirements of ISO 9001:2000 Standard. According to ISO, the application of a system of processes within an organization together with the identification and interactions of these processes, and their management, can be referred to as the "process approach.

The model of a process-based QMS is shown below illustrates the interaction of the processes advocated in the five major ISO clauses, described in detail in Sections 4 through 8 of this manual.



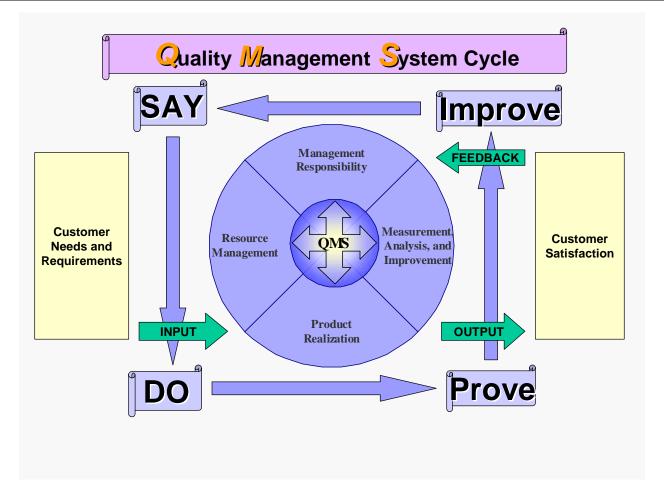
Document # QMS 200

Revision

#21

Title: AMA - 200 Quality Manual

Page 17 of 82



# 4.1 General Requirements

AMA-200 operates and continually improves the effectiveness of a QMS based on policies, procedures, work instructions, and quality records in accordance with the minimum requirements of ISO 9001.



Document #
QMS 200

Revision

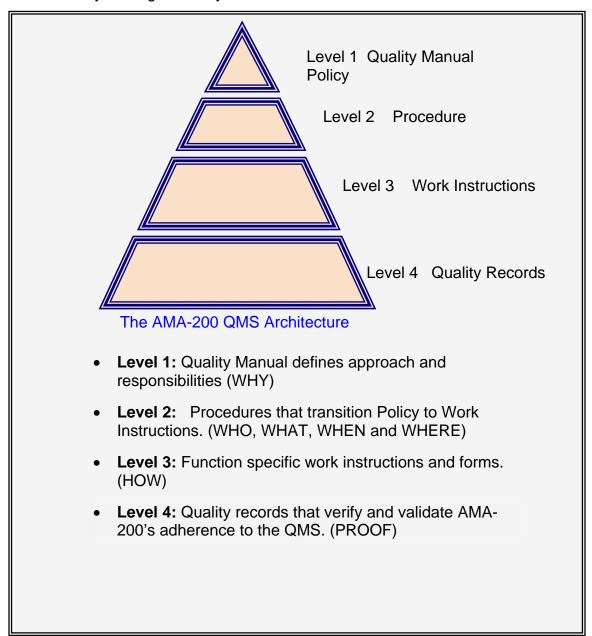
#21

Title:

AMA - 200 Quality Manual

Page 18 of 82

The Quality Management System is structured in four levels:



AMA-200s Production Development Procedure QP-214 and the FAA Academy Guidelines provide guidance in identifying specific resources and production processes needed and their application throughout the QMS, including their sequence and interaction. The Product Development Procedure QP214 specifies how the product criteria and production methods are determined and developed by each branches' Leadership Team, Project Coordinators and Project Teams.



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 19 of 82

AMA-200s management provides the resources (competent personnel, production and development hardware and software, delivery system equipment and infrastructure) to support the operation and monitoring of the processes used to develop, deliver, evaluate and continually improve Job Centered training.

Following the Product Development Procedure QP 214, the managers and personnel of each branch, using class evaluations and Post Delivery Product Reviews will monitor, measure and analyze these processes and training programs. Based on this data, they will take any action necessary to achieve planned results and continual improvement of the processes and products. On a regular basis, top management, during formal management reviews will monitor summarized data regarding these products and provide the resources necessary to ensure continual improvement of AMA-200s products, and processes.

Outsourced processes, such as using subject-matter experts or contractors to develop specific training classes, will be supervised by competent COTRs and/or Project Managers assuring conformance to current FAA orders and guidance.

#### 4.2 **Documentation Requirements**

#### 4.2.1 General

The AMA-200 QMS meets the minimum documentation requirements of ISO 9001:2000 which include:

- 1. Statements of a quality policy and quality objectives
- 2. A quality manual,
- 3. Documented procedures,
- 4. Documentation necessary to ensure effective planning, operation, and control of processes, and
- Quality records.
  - 4.2.1.1 AMA-200 Statement of Quality Policy is :

To develop, deliver, and evaluate, Quality Job Centered Training, utilizing continual improvement, to meet or exceed the requirements of our customers while providing the best possible value.

4.2.1.2 Quality objectives are found in Section 5.

#### 4.2.2 Quality Manual

AMA-200 has established and shall maintain a Quality Manual that includes:

The scope and purpose of AMA-200's QMS



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 20 of 82

- The documented procedures established for AMA-200's QMS.
- Description of the interaction between the processes of the AMA-200 QMS is found in Quality Procedure QP 214.
  - 4.2.2.1 The AMA-200 QMS system consists of the following:
  - 4.2.2.1.1 A system level QMS that, in addition to the items listed above, includes system level policies, procedures, work instructions, and the description of the quality records that are common to all AMA-200 product lines.
  - 4.2.2.1.2 Product line sections that include branch policies, procedures, work instructions, and quality records that are unique to the respective branch product line.
  - 4.2.2.1.3 Appendices that contain:
     AMA-200 Master List of Quality Documents Appendix 1
     AMA-200 Document Control Index System Appendix 2

#### 4.2.3 Control of Documents

- 4.2.3.1 All documentation relating to the quality of AMA-200's products and services will be controlled. Controlled documents would include records associated with the design, development, testing, and subsequent implementation and revision of a product.
- 4.2.3.2 Original document issuance and revisions/amendments will be authorized, controlled and recorded. Development or Revision to courses or other products that require contract personnel shall follow the contract requirements. of AMA-260 guidance. The procedures used to control these documents shall ensure that current information is available and that obsolete information is withdrawn from use.
- 4.2.3.3 AMA-200 identifies and controls documents and data in electronic media that relate to the requirements of this QMS, according to the document control procedure. Hard copy documents will be controlled. Current documents must be legible, identifiable, and readily available to all personnel.
- 4.2.3.4 Any current FAA document may be used within the AMA-200 QMS.



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 21 of 82

- 4.2.3.4.1 External documents used by AMA-200 may include Aircraft Technical Publishers (ATP), Jeppesen Publications and FAA orders and identified as to their origin and the distribution is controlled.
  - 4.2.3.5 The DMT shall ensure that AMA-200 QMS System Level policies, procedures and work instructions are maintained. And controlled.
- 4.2.3.5.1 Documents are reviewed and approved by an appropriate member of the DMT prior to distribution and use.
- 4.2.3.5.2 Documents shall have provisions for review and approval/re-approval authorization, and shall have a means for indicating the revision level.
  - 4.2.3.6 Each branch manager shall review and maintain AMA-200 QMS Product Line Level policies, procedures and work instructions.
  - 4.2.3.7 Each branch manager shall ensure that quality product line level documents will be available where operations are essential to the effective functioning of the QMS.
  - 4.2.3.8 Master/original documents and revisions are available at the AMA-200 web site <a href="http://www.academy.faa.gov/ama200/qms.htm">http://www.academy.faa.gov/ama200/qms.htm</a>
  - 4.2.3.9 The AMA-200 Master List will reflect the current revision status of all documents.

#### 4.2.4 Control of Records

- 4.2.4.1 The QMS is documented through the use of quality records. This section defines the control and maintenance of quality records.
- 4.2.4.1.1 All product lines and related activities are required to validate the achievement of specified requirements and the effective operation of AMA-200 QMS by maintaining quality records.
- 4.2.4.1.2 Records are suitably archived and maintained to ensure their safekeeping and subsequent retrieval.
  - 4.2.4.2 Access to quality related records shall be available as required.



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 22 of 82

- 4.2.4.2.1 All records are legible, clearly identified, and traceable to either the product or service involved, or to the QMS activity they document.
- 4.2.4.2.2 Records shall be filed, indexed, and maintained in a manner that provides for safe storage and ready access or retrievability.
- 4.2.4.2.3 Records shall be an accurate and truthful representation of actual events, documented in a timely manner.
- 4.2.4.2.4 Records shall be dated and initialed or signed by personnel responsible for the documented outcome or activity.

  Electronic format (signature) may be used for validation of records.
- 4.2.4.2.5 Records will be available in electronic or hard-copy.
  - 4.2.4.3 Responsibilities:
- 4.2.4.3.1 Each branch manager shall be responsible for assuring that all product line specific documents are current.
- 4.2.4.3.2 Each branch manager shall ensure that product line level quality records are correctly filed, stored, or linked through the AMA-200 web site.
- 4.2.4.3.3 AMA-200 employees shall ensure that quality related records are compiled in a complete, legible and accurate manner.

## 5. MANAGEMENT RESPONSIBILITY

#### 5.1 Management Commitment

5.1.1 Quality Policy and Objectives

The AMA-200 DMT has developed the Quality Policy and Objectives

Any policies and procedures affecting working conditions shall be negotiated with the appropriate union agreement before implementation.

Employee Involvement and provision of resources.

Teamwork is a AMA-200 strategy to promote continual improvement through collaborative employee involvement. Management responsibility will be periodically and systematically audited as part of AMA-200's Internal Audit



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 23 of 82

Program. Management will also ensure the availability of resources to support AMA-200 QMS

# 5.2 Quality Policy

# 5.2.1 Consistency of Quality Policy

To develop, deliver, and evaluate, Quality Job Centered Training, utilizing continual improvement, to meet or exceed the requirements of our customers while providing the best possible value.

The AMA-200 Quality policy provides the foundation for the establishment of Quality Objectives and top management's commitment to the QMS and its continual improvement. It is communicated and understood within AMA-200 and is reviewed for continuing suitability.

## 5.3 Planning

# 5.3.1 Quality Objectives:

"Each employee is committed to continually improving all products and services and to maintain AMA-200 as a leader in aviation education. In order to meet our goals, we will ensure the following objectives:

- Provide our customers with the high quality products and services with student evaluations meeting 75% satisfaction.
- Provide those products and services on time or ahead of schedule 90% of the time.
- Reduce per student cost at Division level by 2% per year.
  - 5.3.1.1 The Quality Objectives stated above are consistent with the AMA-200 Quality Policy and are measurable.
  - 5.3.1.2 The AMA-200 Quality Policy and Objectives shall be communicated to all levels of the organization to ensure that each employee can contribute to their achievement. In addition to having access to this QMS, each employee will receive training on the AMA-200 Quality Management System, including the AMA-200 Quality Policy and Objectives.



- 5.3.1.3 The AMA-200 Quality Policy and Objectives will be periodically reviewed for continuing suitability and, if necessary, revised as part of the AMA-200 Leadership Team Review process.
- 5.3.2 Quality Management System Planning
  - 5.3.2.1 The AMA-200 Manager is responsible for ensuring that the AMA-200 Strategic plan does not conflict with ISO 9001 requirements.
  - 5.3.2.2 The AMA-200 Division Management Team, through its Management Review process, shall ensure that there is adequate planning to:
  - 1. Meet the requirements of ISO 9001,
  - 2. Meet the AMA-200 Quality policy and Objectives, and
  - 3. Maintain the integrity of the AMA-200 QMS when changes to the QMS are planned and implemented.
    - 5.3.2.3 Quality control plans, written descriptions for system controlling processes, shall be developed to address the important characteristics and requirements for AMA-200 products. In the AMA-200 QMS these written descriptions are known as procedures and, in some cases, work instructions.
  - 5.3.2.3.1 Quality control plans shall be reviewed and updated at regular intervals as the products or processes change.

# 5.4 Responsibility, Authority, and Communication

5.4.1 Organizational Chart and General Responsibilities

The organizational chart below identifies the position with the authority to AMA-200 Division Manager Office Administrator AMA-201 Assistant Division Manager Committed AMA-260 AMA-240 AMA-230 AMA-250 AMA-220 Air Contracts and ISO 9001 Commercial Airworthiness Aircraft Transportation Program Management Transportation Branch Certification Operations Administration Representative Operations Branch . Branch Branch Branch



manage, perform, and verify work affecting the quality of products and services provided by AMA-200.



Document # QMS 200

Revision #21

Title: AMA - 200 Quality Manual

Page 26 of 82

General responsibilities for AMA-200 personnel regarding work affecting quality are summarized below in Table A.

| Table A                      |  |  |
|------------------------------|--|--|
| Who                          | Responsibility and Authority   |  |
| AMA-200 Manager              | Define the Quality Policy,   |  |
|                              | Ensure the communication and understanding of the Quality Policy throughout the organization, and participate in the Management Review. Provide the resources necessary to implement and maintain the QMS. |  |
| Management<br>Representative | Document and maintain the Quality Policy,  |  |
|                              | Ensure that the QMS is established, implemented, and maintained,   |  |
|                              | Coordinate regular reviews of the suitability and effectiveness of the QMS, and  |  |
|                              | Coordinate improvements to the QMS.  |  |
| Assistant Manager            | Approve the policies, procedures, and work instructions.   |  |
|                              | Ensure that qualified, skilled, and trained personnel and other resources are available to implement the QMS, and  |  |
|                              | Obtain customer requirements and communicate them to the appropriate personnel or functional organizations.  |  |
| Branch Managers              | Implement the QMS,   |  |
|                              | Ensure that products and services satisfy customer requirements including quality, safety, cost, schedule, performance, reliability, durability, accuracy, and maintainability, and                        |  |
|                              | Ensure that personnel comply with applicable standards, regulations, specifications, and documented procedures.  |  |



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 27 of 82

# 5.4.2 Management Representative

The AMA-200 Manager shall appoint the AMA-200 Management Representative. The AMA-200 Management Representative will have responsibility and authority for all matters concerning the AMA-200 QMS, including:

- 5.4.2.1 The implementation and maintenance of the QMS.
- 5.4.2.2 Reviewing the QMS at least annually.
- 5.4.2.3 Ensuring that processes needed for the QMS are established, implemented, and maintained.
- 5.4.2.4 Reporting to the AMA-200 Leadership Team on the performance of the AMA-200 QMS and need for improvement through the Management Review meetings.
- 5.4.2.5 Ensuring the promotion of awareness of customer requirements throughout the AMA-200 organization.
- 5.4.2.6 Interfacing directly with the ISO Registrar and other external parties as required.

#### 5.4.3 Internal Communication

AMA-200 Management has established a communication infrastructure that is appropriate for the work environment and fosters an effective QMS.

- 5.4.3.1 Information pertinent to the AMA-200 QMS is posted and kept current on a server accessible to all employees.
- 5.4.3.2 Each AMA-200 employee has access to the AMA-200 web site that provides current information on matters that affect quality.
- 5.4.3.3 Normally, weekly all-hands meetings are conducted by AMA-200 Management to ensure a consistent flow of information pertinent to the AMA-200 QMS.
- 5.4.3.4 Internal communication shall primarily be through Branch meetings and Emails.

#### 5.5 Management Review

#### 5.5.1 General - Leadership Team Review

5.5.1.1 The AMA-200 QMS will be reviewed at least annually by the AMA-200 Leadership Team to ensure its continuing suitability, adequacy, and effectiveness. The AMA-200



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 28 of 82

Leadership Team consists of all branch managers or designees.

- 5.5.1.2 The annual Leadership Team Review shall be conducted in accordance with its associated Management Review Procedure with emphasis on assessing any need for changes or opportunities for improvement in the QMS, including the AMA-200 Quality Policy and Objectives..
- 5.5.1.3 The records of the Leadership Team Reviews shall be maintained with AMA-200 document and record control procedures.

#### 5.5.2 Procedures implementing Management Responsibility

| AMA-200 Quality Procedure Number | AMA-200 Quality Procedure Description       |
|----------------------------------|---|
| QP 211                           | Management Review Procedure                 |
| QP 214                           | Product Development Procedure               |
| QP 217                           | Corrective and Preventive Action Procedure  |
| QP 208                           | Control of Nonconforming Products Procedure |
| QP 260                           | Contractor Development Procedure            |

# 6. RESOURCE MANAGEMENT

# 6.1 Provision of Resources

- 6.1.1 Management Responsibility
  - 6.1.1.1 Management shall ensure that the resources essential to the implementation of the strategy and achievement of the organization's objectives are identified and made available.
  - 6.1.1.2 The AMA-200 Manager shall determine and provide the resources necessary to:
  - Implement and maintain the QMS,
  - 2. Continually improve the effectiveness of the QMS, and
  - Promote customer satisfaction by meeting or exceeding customer requirements.



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 29 of 82

#### 6.2 Human Resources

#### 6.2.1 General

AMA-200 personnel performing activities affecting product quality shall be appropriately competent on the basis of education, training, skills, and experience. Training records for all AMA-200 employees are maintained in the Consolidated Personnel Management Information Subsystem, (CPMIS

#### Competence, Awareness, and Training

- 6.2.1.1 It is AMA-200's policy to determine the competence level required for personnel performing work affecting quality and provide the training necessary to ensure that competence level is achieved.
- 6.2.1.2 Each AMA-200 team member must be competent and shall receive the following training before being assigned work affecting quality:
- 1. AMA-200 Indoctrination Training.
- Product Line Specific Training
- 3. General training on the ISO 9001:2000 Quality Management.
- 4. Other specialized training, as required
- 5. Training is required to be accomplished within 30 days of reporting for duty on items 1 and 3.
  - 6.2.1.3 At the completion of Basic Instructor Training each person will understand the relevance and importance of their activities and how they contribute to the overall effectiveness of the QMS.
  - 6.2.1.4 AMA-200 shall evaluate the effectiveness of training using one or all of the following, an end of course evaluation; management assessment; and/or demonstration of knowledge, skills and abilities.
  - 6.2.1.5 Each Branch Manager shall determine the minimum qualification standards within their product line.
  - 6.2.1.6 The Branch Managers are responsible for ensuring that all personnel receive required training and for maintaining training records.



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 30 of 82

## 6.3 Infrastructure

6.3.1 AMA-200 management, in coordination with top management of the Federal Aviation Administration shall determine, provide, and maintain the infrastructure needed to achieve conformity to AMA-200 product requirements.

# 6.4 Work Environment

- 6.4.1 Work Environment, Management and Employee Responsibility
  - 6.4.1.1 The AMA-200 work environment must have a positive influence on the motivation, satisfaction, and performance of personnel in order to enhance the effectiveness of the organization.
  - 6.4.1.2 The AMA-200 Manager shall determine and manage the work environment needed to achieve conformity to product requirements.
  - 6.4.1.3 AMA-200 personnel may work in an environment where the nature of their position requires that their primary duties be performed outside the confines of a traditional office.
  - 6.4.1.4 A workplace is a work environment where goods and services are created and delivered, mainly in a classroom environment, beyond the traditional bounds of time and physical location.
  - 6.4.1.5 It is the responsibility of each AMA-200 employee to ensure that all safety rules, ergonomics, and physical attributes of their work place meet appropriate standards. These items may include heat, humidity, light, airflow, hygiene, cleanliness, noise, vibration, and pollution.
  - 6.4.1.6 The physical work environment must meet the same safety standards as the Aeronautical Center requires of all organizations located at the Mike Monroney Aeronautical Center



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 31 of 82

#### 7. PRODUCT REALIZATION

# 7.1 Planning of Product Realization

# 7.1.1 Quality Planning

The Management Representative has the responsibility to facilitate quality planning. The Management Representative shall ensure that planning for product realization will be consistent with the requirements of the other processes of the AMA-200 QMS.

The Leadership Team shall determine the specific resources required to ensure customer requirements are met. Current quality plans, objectives, and records are defined in existing procedures documents established by the respective product lines.

New product development quality plans are defined in the AMA-200 Quality Product Development Procedure QP 214. If additional contract Instructional, or Revision and development is needed to meet the customer requirements the procedures in QP 260 shall be followed.

#### 7.2 Customer Related Processes

- 7.2.1 Determination of Requirements Related to the Product
  - 7.2.1.1 For existing product lines, the determination of the criteria listed in 7.2.1.3, below, are identified in the respective product line sections of this manual.
  - 7.2.1.2 For new products or major changes to existing products, reference the criteria listed below and Section 7.3 of this manual.
  - 7.2.1.3 Product requirements include:
  - 1. Requirements specified by the customer, including delivery and post-delivery activities.
  - 2. Requirements that are not stated by the customer but are known to be necessary to meet specifications or for intended use.
  - 3. Any statutory and regulatory requirements related to the product.
  - 4. Any additional requirements determined by AMA-200.
- 7.2.2 Review of Requirements Related to the Product
  - 7.2.2.1 For existing product lines, the respective Branch Manager shall review the requirements in accordance with the



# **Regulatory Standards Division**

Document #
QMS 200

Revision #21

AMA - 200 Quality Manual

Page 32 of 82

policy and procedures established in the respective product line sections of this manual.

- 7.2.2.2 For new products or major changes to existing products, the Division Manager shall review and evaluate each customer request in accordance with the Product Development Procedure QP 214. During this review, the Division Manager shall ensure that:
- 6. Product requirements are defined.
- 7. Any conflicts with or changes to the original request are resolved.
- 8. AMA-200 has the ability to meet the requirements.
- 9. The customer request meets the criteria specified in the Product Development Procedure.
  - 7.2.2.3 Any customer request, whether written or verbal, shall be documented by a Leadership Team member using the Customer Request Information Document QF 214.
- 7.2.2.3.1 The evaluation of a customer request shall be conducted by members of the Leadership Team and documented on the Review of Customer Request Information.
- 7.2.2.3.2 Any changes to product related requirements will be documented and disseminated in accordance with the Product Development Procedure.

#### 7.2.3 Customer Communication

Communication with the customer will be done in accordance with the Product Development Planning Work Instructions WI 214.02 and shall, as a minimum, address the following:

- Product information
- Questions, agreements, and when applicable, amendments
- Customer feedback, including complaint feedback.

#### 7.2.4 Documents implementing customer and product related processes

| Procedure Number | AMA-200 Quality Document Description  |
|------------------|---------------------------------------|
| QP 214           | Product Development Procedure         |
| QF 214           | Customer Request Information Document |



# **Regulatory Standards Division**

AMA - 200 Quality Manual

Document #
QMS 200

Revision

#21

Page 33 of 82

# 7.3 Design and Development

- 7.3.1 Design and Development Planning
  - 7.3.1.1 This policy defines the way in which design and development will be controlled.
  - 7.3.1.2 It is AMA-200's policy to design, develop and supply a range of high quality, cost effective and innovative products that will satisfy customer requirements. AMA-200 design and development activities QP 214 will be based upon documented Academy guidelines and the Guiding Principles of LD-5.1. These activities shall include:
  - 1. Determination of the design and development stages,
  - 2. Design and development planning,
  - 3. Design review,
  - 4. Transfer of design from development to verification, validation, and implementation,
  - 5. Feedback from all relevant sources which shall be used to improve the quality of design, and
  - 6. Identification of areas for new product development.
    - 7.3.1.3 AMA-200 shall control design activities, and shall verify that the resulting design meets all specified requirements. Design is not viewed as encompassing minor modifications (course maintenance) to standard products. AMA-200 shall use advanced and proven methodologies for developing and improving product design. Acceptable methodologies shall:
  - 1. Simplify and optimize design;
  - 2. Improve understanding and integration of customer needs and expectations; (proper functioning of the product.);
  - 3. Consider studies of cost, performance, and risk; and
  - 4. Establish feedback channels from testing, production, and delivery.
    - 7.3.1.4 The design and development functions will be periodically and systematically audited as part of AMA-200's Internal



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 34 of 82

Audit Plan to insure compliance with the Academy Guidelines.

- 7.3.1.5 Responsibilities
- 7.3.1.6 The Branch manager or designee shall develop a Project Overview Statement and assign a Project Coordinator.
- 7.3.1.7 The Branch Manager and the Project Coordinator (i.e. Course Manager) shall develop a draft plan in accordance with the Product Development Procedure.
- 7.3.1.8 Planning

The Branch Manager and Project Coordinator shall be responsible for defining a product design and development plan that:

- 7.3.1.9 Describes the major project activities,
- 7.3.1.10 Identifies individuals responsible for task implementation,
- 7.3.1.11 Assigns capable and qualified personnel,
- 7.3.1.12 Identifies relevant stakeholders.
- 7.3.1.13 Assures adequate resources, and
- 7.3.1.14 Provides for the management of interfaces between different groups involved in design and development to ensure effective communication and clear assignment of responsibility.
- 7.3.3.7 A product design (i.e. CDG, Course Design Guide) and each development plan is created for each new product design or major revision of existing products. Each product design and each development plan is reviewed and approved before detailed design or development begins. The product design and each development plan is also updated as the product evolves through the stages of design, development, verification, validation and release for implementation.
- 7.3.2 Design and Development Inputs
  - 7.3.2.1 Design input requirements are identified, reviewed, specified, and communicated in accordance with the AMA-200 Product Development Procedure. The inputs shall, as a minimum, include:
    - 1. Functional and performance requirements,
    - 2. Applicable statutory and regulatory requirements,



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 35 of 82

- When applicable, information derived from previous similar designs, and
- 4. Other requirements and Standards (FAA-STD-028C) essential for design and development.
- 7.3.2.2 The design inputs shall be reviewed for adequacy and for assurance that requirements are complete, unambiguous, and not in conflict with each other. Records of design input shall be maintained as defined in the control of records procedure (QP 209).

## 7.3.3 Design and Development Outputs

- 7.3.3.1 Design outputs shall enable verification against the design and development input and shall be approved prior to release of the product. Design output shall:
- 1. Meet the design input requirements,
- 2. Contain or make reference to acceptance criteria,
- Identify those characteristics of the design that are crucial to the safe and proper functioning of the product, and
- 4. Provide appropriate information for production.

#### 7.3.4 Design and Development Review

Formal reviews are planned, conducted, and documented during concept, definition, design, production, testing, and documentation stages in accordance with the Product Development Procedure and the planning document relating to the development of a specific product. Records of all reviews shall be maintained as defined in Control of Records Procedure (QP 209).

#### 7.3.5 Design and Development Verification

7.3.5.1 The Project Coordinator shall ensure that activities for verifying the design are conducted in accordance with the quality plan that is approved for the specific project.

Records of verification shall be maintained as defined in Control of records Procedure QP 209.

# 7.3.6 Design and Development Validation

7.3.6.1 The Project Coordinator shall ensure that all final products conform to the defined user needs and requirements.

Design validations are conducted when appropriate, and documented in accordance with the Product Development Procedure.



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 36 of 82

## 7.3.7 Control of Design and Development Changes

- 7.3.7.1 AMA-200 shall control design and development changes in accordance with the Product Development Procedure.
- 7.3.7.2 Changes shall be identified and documented.
- 7.3.7.3 Changes shall be reviewed, verified and validated, as appropriate, and approved by the Branch Manager, before implementation.
- 7.3.7.4 The review of changes shall include evaluation of the effect of the changes on product parts and products already delivered
- 7.3.7.5 Records of changes and any necessary actions shall be maintained.
- 7.3.7.6 Delivered products involving classroom instruction by AMA-200 personnel, shall be conducted and maintained following Division policy QP 218.
- 7.3.7.7 Obsolete documents and handouts shall be destroyed, stamped obsolete, stamped "For Training Purposes Only" and shall not be disposed in trash cans outside classrooms.

#### 7.3.8 Documents implementing Design and Development Planning

| AMA-200 Quality Procedure Number | AMA-200 Quality Procedure Description |
|----------------------------------|---------------------------------------|
| QP 214                           | Product Development Procedure         |
| QF 214                           | Customer Request Information Document |
| QP 209                           | Control of Records Procedure          |
| QP 218                           | Classroom Process                     |

# 7.4 Purchasing

7.4.1 Purchasing Process As a part of the Federal Aviation Administration (FAA), AMA-200 is supported in its procurement activities by the FAA procurement process that operates externally to AMA-200 and in which AMA-200 must follow that external procurement process. AMA-200 interfaces with AMQ (Office of Acquisition Services) through the process identified below. The manner and method for purchasing



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 37 of 82

items and from whom they must be purchased is mandated by the following and controlled by AMQ:

- 1. U.S. Government Code,
- 2. U.S. Government purchase card program procedures and requirements (for credit card purchases), and
- 3. AMQ procurement guidelines as administered by AMA-100.

Excluded from this process is the requisition and purchase of office supplies. The nature of these items and their negligible impact on AMA-200 products is the basis for this policy.

- 7.4.2 Purchasing Information
  - 7.4.2.1 External products: Prior to making a purchase, the respective Branch Manager shall ensure that product specifications meet the requirements of the product's intended use.
- 7.4.3 Verification of Purchased Product
  - 7.4.3.1 The Branch Manager or Project Coordinator, as appropriate, and the Division Manager shall verify that purchased product meets the requirements of its intended use prior to implementing its use.
  - 7.4.3.1.1 In the event the purchased product does not meet its purchase requirements, it will be returned to the supplier/vendor in accordance with the existing FAA procedures.
    - 7.4.3.2 AMA-200 may perform inspections or other verification activities on supplier/vendor premises.

# 7.5 Production and Service Provision

- 7.5.1 See exclusions. AMA-200 does not provide any warranty service to products it produces.
- 7.5.2 See exclusions.
- 7.5.3 Identification and Traceability: All products are identified by either course and class number or contract number. For FAA personnel traceability of the product is maintained in CPMIS and non-FAA personnel records are maintained for two years and then disposed



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 38 of 82

through shredding. AMA-200 identifies product status as defined in the Production Plan QP 214

- 7.5.4 See exclusions. Customer Property: AMA-200 does not use or control customer property.
- 7.5.5 Preservation of Product: AMA-200 shall ensure the preservation of product and its constituent parts by storing electronic products on the "W" drive of the LAN and paper products in appropriate controlled storage or file areas .

# 7.6 Control of Monitoring and Measuring Devices

See Exclusions

# 8. MEASUREMENT, ANALYSIS, AND IMPROVEMENT

## 8.1 General

# 8.1.1 Policy

This policy defines the way in which AMA-200 plans and implements its monitoring, measurement, analysis, and improvement processes. These concepts shall be used by AMA-200 for the following purposes:

- 1. To demonstrate conformity of the product,
- 2. To ensure compliance with the QMS,
- 3. To continually improve the effectiveness of the QMS, and
- To ensure customer satisfaction.
- 8.1.2 The Management Representative shall identify the need for statistical techniques and establish methods and instructions for their application. The selection of the appropriate statistical tools for individual processes is established through quality planning.

# 8.2 Monitoring and Measurement

## 8.2.1 Customer Satisfaction

8.2.1.1 The Management Representative at the system level and the Branch Managers at the product line levels are responsible for determining methods for documenting and establishing trends used to determine customer satisfaction.



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 39 of 82

- 8.2.1.2 Customer complaints will be evaluated by the Management Representative or respective Branch Manager, as appropriate, to determine validity.
- 8.2.1.3 The Management Representative will review all valid customer complaints.
- 8.2.1.4 Any valid customer complaint will be moved into the corrective action process.
- 8.2.1.5 Customer satisfaction shall be determined by using customer feedback as identified in product's quality control plan.
- 8.2.1.6 Customer feedback is preferred in electronic form (i.e. Email. Microsoft Word Document).
- 8.2.1.7 The results of customer feedback will be forwarded to the Leadership Team through the Management Representative for review during the Management Review process.

## 8.2.2 Internal Audit

AMA-200 shall conduct internal audits at planned intervals to determine the effectiveness of its Quality Management System. AMA-200 plans and conducts internal quality audits for the following purposes:

- 1. To verify whether quality activities comply with the requirements of the AMA-200 QMS and ISO 9001.
- 2. To ensure the continuing suitability of the QMS and working environment.
- 3. To provide the audited organization with an opportunity to improve their processes.
  - 8.2.2.1 All audits will be conducted according to an audit plan approved by the Internal Audit Program Manager.
- 8.2.2.1.1 An auditor(s) shall not audit an area where he/she is responsible for the work accomplished.
- 8.2.2.1.2 Auditors will be properly trained and qualified, and will follow industry guidance and the requirements of the AMA-200 Internal Audit Program.
- 8.2.2.1.3 Scheduled audits will be conducted throughout the year and no Branch shall go more than one (1) year between audits. A complete audit of the AMA-200 Quality



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 40 of 82

Management System shall be performed every three (3) years.

- 8.2.2.1.4 Audits will be recorded and all nonconformities documented on a Quality Corrective Action Request (QCAR). QCARs will be maintained by the management representative.
- 8.2.2.1.5 Audit results will be distributed to the branch manager and the management team, if applicable
- 8.2.2.1.6 Each audit scheduled will take into consideration status and importance of the activity.
  - 8.2.2.2 Prior to initiation of an audit, the Lead Auditor shall notify the Branch Manager.
  - 8.2.2.3 The AMA-200 Leadership Team shall:
- 1. Determine the purpose and general scope for a non-routine audit.
- Determine which standards shall be used for non-routine audits.
- 3. Notify the Internal Audit Program Manager.
- 4. Ensure that corrective actions are initiated and closed in a timely manner.
  - 8.2.2.4 The appropriate Branch Manager shall, when applicable:
- 1. Inform relevant team members of an impending audit.
- 2. Cooperate with the audit team to permit the audit objectives to be achieved.
- 3. Engage in the corrective action process and, with the concurrence of the Division Manager, take timely action to remedy any nonconformity.
  - 8.2.2.5 The Internal Audit Program Manager shall:
  - 1. Establish and maintain documented procedures for the planning and implementation of audits.
  - 2. Establish and maintain an annual audit schedule.
  - 3. Establish and maintain a list of currently qualified auditors on the Audit web site.
  - 4. Select audit team members.
  - 5. Monitor all audit and follow-up activities to ensure that the requirements are met.
  - 6. Submit the audit plan to the Leadership Team for approval.



Document #
QMS 200

**Revision** 

#21

Title:

**AMA - 200 Quality Manual** 

Page 41 of 82

- 7. Distribute audit results to Management.
- 8. Maintain the Internal Audit web sites, audit tool, quality procedures, and work instructions to ensure compliance with QMS requirements.
- 9. Maintain records documenting the audit process and results for a period of five (5) years.
- 8.2.2.6 The Lead Auditor shall:
- 1. Be responsible for all phases of the audit,
- 2. Have authority to make final decisions regarding the conduct of the audit and any audit observations
- Assist with the selection of audit team members;
- 4. Prepare the audit plan, working documents, develop a checklist, gather reference materials and standards, and brief the audit team.
- 5. Review and analyze QCARs,
- 6. Complete the Final Audit Report, and
- 7. Verify the effectiveness of QCARs.
  - 8.2.2.7 The Auditor shall:
- 1. Complete the audit checklist by obtaining objective evidence.
- 2. Generate QCARs as required.
- Forward audit results to the Lead Auditor.
  - 8.2.2.8 Procedure Implementing the AMA-200 Internal Audit Program.

| AMA-200 Quality Procedure Number | AMA-200 Quality Procedure Description |
|----------------------------------|---------------------------------------|
| QP 205                           | Internal Audit Program (IAP)          |

# 8.2.3 Monitoring and Measurement of Processes

8.2.3.1 The Internal Audit Program Manager shall be responsible for the planning and implementation of scheduled and unscheduled quality audits to verify compliance with the requirements of the ISO 9001 standard. Qualified personnel in accordance with the AMA-200 Internal Audit Program (IAP) shall conduct audits.



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 42 of 82

- 8.2.3.2 The IAP Manager shall report audit results. Corrective action shall be implemented in accordance with the requirements described in this manual.
- 8.2.3.3 The Leadership Team may identify additional methods of measurement to evaluate process performance. The identification of process performance measures will be documented in the Action Item section of the Management Review Checklist, QF 211.01.

# 8.2.4 Monitoring and Measurement of Product

- 8.2.4.1 AMA-200 follows the Product Development Procedures QP-214 to monitor and measure the characteristics of its products to verify that the appropriate requirements have been met at each stage of production. Actions will be taken to ensure that each nonconformity is identified at the earliest possible stage in order to facilitate corrective action and continual improvement. All "in-process" products shall be under the control of the Project Coordinator or applicable Branch Manager until it is released.
- 8.2.4.2 AMA-200 shall maintain records for evidence of conformity including acceptance criteria for each product. These records shall indicate the person(s) authorizing the release of the product, which will normally be done by the appropriate Branch Manager or Project Coordinator and the Assistant Division Manager. A product shall not be released or delivered by AMA-200 until the requirements of the quality control plan have been satisfactorily completed, unless otherwise approved by top management, and where applicable, by the customer.

# 8.3 Control of Nonconforming Product

## 8.3.1 Employee Reporting of Nonconformities

All AMA-200 employees are empowered with the authority and responsibility to report nonconformities at any stage of a process in order to ensure timely detection and disposition of the nonconformities. AMA-200 shall ensure that any product that does not conform to specific requirements is identified and controlled to prevent its unintended use or delivery.

8.3.2 Procedures Implementing Control of Nonconforming Product

**AMA-200 Quality Procedure** 

**AMA-200 Quality Procedure Description** 



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 43 of 82

| Number |                                  |
|--------|----------------------------------|
| QP 208 | Control of Nonconforming Product |

# 8.4 Analysis of Data

The Leadership Team is responsible to determine and analyze the data necessary to demonstrate the suitability and effectiveness of the QMS.

The Management Representative is responsible to collect the data for the Management Review process.

This process will lead to a determination of where continual improvement of the effectiveness of the QMS can be made. Data generated as a result of monitoring and measurement will include customer feedback, employee feedback, document change requests, and QCARs. The analysis of data shall provide, at a minimum, information relating to:

- 1. Satisfaction of customers and other interested parties,
- 2. Effectiveness and efficiency of its processes,
- 3. Conformity to product requirements, and
- 4. Opportunities for preventive action.
- Data from suppliers.

# 8.5 Improvement

# 8.5.1 Continual improvement Policy and Responsibilities

It is the policy of AMA-200 to continually improve the effectiveness of the QMS through the use of quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions, and management review.

It is the responsibility of the AMA-200 Management Representative to ensure that the concepts of continual improvement are communicated throughout AMA-200 and that personnel receive the appropriate education and training in continual improvement tools and techniques.

8.5.1.1 The Leadership Team shall ensure that all personnel have the opportunity to contribute to the continual improvement process, to include a review of the quality policy, quality objectives, audit results, analysis of data, and corrective and preventive actions.



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 44 of 82

- 8.5.1.2 The AMA-200 Management Representative shall coordinate the corrective action activity for all nonconformities.
- 8.5.1.3 The Management Representative and Branch Managers, as appropriate, shall be responsible for timely implementation of improvement actions with the concurrence of Division Manager.

## 8.5.2 Corrective Action

It is AMA-200's policy to strive to continually improve in the areas of quality, service and delivery for all customers. To prevent the recurrence of detected nonconformities AMA-200 establishes and maintains procedures for implementing corrective action and continual improvement.

The Division Management Team will

- Review nonconformities including customer complaints.
  - Determining the causes of nonconformities.
  - Evaluating the need for action to ensure that nonconformities do not recur.
  - Determining and implementing action needed.
  - · Records of the results of action taken.
  - Reviewing corrective actions taken.

## 8.5.3 Preventive Action

- 8.5.3.1 The preventive action directed by AMA-200 focuses on improving the QMS, policies, processes, procedures, and work instructions before potential problems arise.
- 8.5.3.2 AMA-200 shall establish a documented procedure to:
- 1. Identify causes of potential nonconformities,
- 2. Evaluate the need for action to prevent nonconformance,
- Determine and take actions needed,
- 4. Record results, and
- Review action taken.
  - 8.5.3.3 Preventive actions are initiated, controlled, and documented through the use of the Quality Corrective Action Request (QCAR) process, which is specified in the Corrective and Preventive Action procedure. AMA-200 Preventive Action Procedures are utilized when:



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 45 of 82

- Any AMA-200 employee or customer identifies opportunities for improvement.
- 2. Information such as quality records, customer feedback, and management reviews indicate potential problems.
- 3. Revisions to the QMS, product line processes, quality procedures, and/or work instructions would improve an AMA-200 product.
  - 8.5.3.4 The Management Representative or Branch Manager and/or Assistant Division Manager, as appropriate, shall initiate the preventive action for the related QMS element and/or procedure. The Program shall process each QCAR in accordance with the Corrective and Preventive Action procedure.

# 8.5.4 Control of the Improvement Process

- 8.5.4.1 The Quality Corrective Action Request (QCAR) process initiates and controls all actions. Nonconformities detected shall be analyzed to determine root cause. The QCAR procedures specify actions for eliminating the root cause of actual or potential QMS problems. Corrective, preventive and continual improvement actions shall be assessed for their effectiveness in a timely manner.
- 8.5.4.2 Review of corrective, preventive and continual improvement actions shall be a part of the Leadership Team Review.
- 8.5.4.3 Corrective, preventive and continual improvement actions for the improvement of key processes in production, business, and support functions are developed and documented in the AMA-200 Leadership Team Review process in an effort to continually enhance standardization, productivity and efficiency. Special emphasis is given to those processes identified as most important to AMA-200 customers.

# 8.5.5 Procedures Implementing Improvement

| AMA-200 Quality Procedure<br>Number | AMA-200 Quality Procedure Description |
|-------------------------------------|---------------------------------------|
| QP 205                              | Internal Audit Program (IAP)          |
| QP 211                              | Management Review                     |
| QP 217                              | Corrective and Preventive Action      |



Document # **QMS 200** 

Revision

#21

Title:

AMA - 200 Quality Manual

Page 46 of 82

QP 208

Control of Nonconforming Products

# AIRCRAFT CERTIFICATION BRANCH (AMA-220)

#### 9.1 Introduction

The Aircraft Certification Branch provides standardized, timely, technical reference training to AVS personnel. Industry, Military and International students may also attend the training. A listing of all applicable AMA-220 procedures, work instructions, forms, and other quality documents are contained in the AMA-220 Appendix 1, Master List of QMS Documents and are also located on the AMA-200 website.

#### 9.1.1 Scope

This section applies to products and personnel within the AMA-200 branch. They include Classroom Instruction, Web based Instruction, Development/ Revision of course material and support of other AMA-200 product lines. This branch also handles quota management for AVS personnel.

#### 9.1.2 Purpose

The AMA-220 Team is dedicated to increasing overall performance standards in the instructional process through a comprehensive review process, thereby enhancing the ability to meet or exceed the customer expectations.

#### 9.1.3 Authority

The AMA 220 Manager is authorized to assign personnel, implement and maintain the policies and procedures related uniquely to the branch product line.

The branch manager may delegate his/her authority for the product line; however, he/she maintains ultimate responsibility.

#### 9.1.4 Responsibilities

General responsibilities for branch personnel regarding work-affecting quality are summarized in Table A of section 5.5.

#### 9.1.5 Review

The branch manager will review the contents of Section 9 and associated product line documents at least annually.

# **Terms, Definitions and Acronyms**

See Section 3



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 47 of 82

# 9.3 Quality Management System

### 9.3.1 General

- 9.3.1.1 The QMS quality system is a formal system of controlled and planned activities established for the production of products within its scope. All activities associated with products produced by the aircraft certification branch are governed by procedures and written instructions found in this section.
- 9.3.1.2 The branch manager shall be responsible for the development and maintenance of policies, procedures and documentation that will ensure the effectiveness of the QMS. This documentation shall include:
  - a. Documented statements of a quality policy and quality objectives,
  - b. Documented procedures required by ISO 9001:2000,
  - c. Documents needed by the organization to ensure the effective planning, operation and control of branch processes, and
  - d. Records required by the ISO 9001 standard.

## 9.3.2 Control of Documents and Records

- 9.3.2.1 The branch manager shall store and maintain product line related quality documents and records in accordance with AMA-200 policy and procedure regarding the control of documents and records.
- 9.3.2.2 Management Responsibility

The branch manager shall ensure that customer requirements are determined and met with the aim of enhancing customer satisfaction.

# 9.3.3 Quality Policy

- 9.3.3.1 All personnel assigned to the aircraft certification branch will receive training and guidance regarding the meaning of the quality policy statement and will be expected to understand their role within it.
- 9.3.4 Planning



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 48 of 82

9.3.4.1 The branch manager shall ensure that quality objectives, including those needed to meet requirements for each product, are established at relevant functions and levels within the branch. Branch members will complete all forms following the procedures, work instructions and forms outlined in the QMS.

## 9.3.5 Internal Communications

- 9.3.5.1 The division managers shall ensure that appropriate communication channels are established within all branches and that communication takes place regarding the effectiveness of the QMS.
- 9.3.5.2 Internal communication may be in the form of Management or Team Member-led meetings and/or briefings. These meetings or briefings could include teleconferences (telecomm).

# 9.3.6 Management Review

9.3.6.1 In order to ensure continuing suitability, adequacy and effectiveness, the branch manger will review their appropriate portion of the AMA-200 QMS at least annually. The review shall include the assessment of opportunities for improvement and the need for changes, including quality policy and objectives.

# 9.4 Resource Management

### 9.4.1 General

- 9.4.1.1 The division managers and branch managers jointly share in the responsibility for the execution of all branch processes.
- 9.4.1.2 The branch manager shall ensure that the branch is staffed with trained and qualified personnel.

# 9.4.2 Human Resources

9.4.2.1 The training objective of the aircraft certification branch is to provide its personnel with knowledge and skills, which, together with experience, improve their effectiveness as Academy Instructors.



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 49 of 82

- 9.4.2.2 The branch will maintain minimum qualification standards for all positions. It is the policy of the branch to identify and provide job centered training to all personnel.
- 9.4.3 Branch Training Curriculum
  - 9.4.3.1 Basic Instructor Training.
  - 9.4.3.2 Sharing Instructor Techniques.
  - 9.4.3.3 ISO 9001:2000 QMS & Internal Auditing Techniques
  - 9.4.3.4 Curriculum Development
  - 9.4.3.5 AMA-200 QMS 200, Quality Procedures, Quality Forms and Quality Documents
  - 9.4.3.6 Instructional Testing

## 9.5 Product Realization

9.5.1 Planning of Product Realization

Planning of Product Realization shall be accomplished in accordance with the AMA-200 process outlined in Section 7 of this manual.

- 9.5.2 Requests for new products or major changes to existing products shall be accomplished in accordance with Section 7.3 of this manual.
  - 9.6.3 Classroom processes shall be accomplished following Classroom Instruction Procedures.
  - 9.6.4 For Distance Learning (DL) processes the user manual in the course documentation file on the "W" drive will be used to manage the web based courses as applicable. Further guidance is located in the DL procedure QP 220.

# 9.6 Measurement, Analysis, and Improvement

- 9.6.1 Customer Satisfaction
  - 9.6.1.1 The branch manager is responsible for documenting and establishing trends to determine customer satisfaction for the branch. Customer satisfaction shall be determined by using customer feedback through annual planning meeting, e-mail and phone calls.
  - 9.6.1.2 The branch manager shall determine the validity of customer complaints. All valid complaints must be



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 50 of 82

documented and communicated to the division management team by e-mail or other means.

- 9.6.2 Internal Audits
  - 9.6.2.1 The branch manager shall be responsible for conducting internal audits of the branch procedures and process.
- 9.6.3 Control of Nonconforming Product
  - 9.6.3.1 All branch employees are empowered with the authority and responsibility to report nonconformities at any stage of a process in order to ensure timely detection and disposition of the nonconformities.

# 9.7 Aircraft Certification Documentation

Quality documents required for this section are listed in the AMA-220 documents portion of Appendix 1, Master List of QMS Documents and shall be generated and managed in accordance with the AMA-200 Control of Documents and Records procedure

# 10. COMMERCIAL TRANSPORTATION OPERATIONS BRANCH (AMA-230)

# 10.1 Introduction

The Commercial Transportation Branch AMA-230 provides standardized, timely, technical reference training to AVS personnel. This is a customer driven program for the use of FAA personnel in support of their job functions. Industry, Military and International may also attend the training. Branch policies, procedures, work instructions, and quality records are formally documented and controlled. Quality System documents for this branch are easily accessible and printable from the AMA-200 web site.

Links to these procedures, work instructions, forms, and other quality documents are contained in the AMA-223 documents portion of Appendix 1, Master List of QMS Documents

### 10.1.1 Scope

This section applies to products and personnel within the AMA-230 branch. The processes include Classroom Instruction, Flight Instruction, Development/Revision of course material and support of other AMA-200 product lines.

## 10.1.2 Purpose



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 51 of 82

The AMA-230 Team is dedicated to increasing overall performance standards in the instructional process through a comprehensive review process, thereby enhancing the ability to meet or exceed the customer expectations.

This manual provides evidence to all customers and employees that the AMA-230 branch is committed to establishing and maintaining acceptable levels of measurable Quality in its products.

# 10.1.3 Authority

The AMA 230 Manager is authorized to assign personnel to the branch. The branch manager, with the concurrence of the Division Manager, is authorized to implement and maintain the policies and procedures related uniquely to the branch product line.

The branch manager may delegate his/her authority for the branch product line; however, he/she maintains ultimate responsibility.

# 10.2 Quality Management System

## 10.2.1 General

- 10.2.1.1 The quality system is a formal system of controlled and planned activities established for the production of products within its scope. All activities associated with products produced by the AMA-230 branch are governed by procedures and written instructions found in this section.
- 10.2.1.2 The Branch Manager shall establish procedures and documentation that will assure compliance to the quality process. This documentation shall include:
- 10. Documented statements of a quality policy and quality objectives,
- 11. A AMA-230 quality section,
- 12. Documented procedures required by ISO 9001:2000,
- 13. Documents needed by the organization to ensure the effective planning, operation and control of branch processes, and
- 14. Records required by the ISO 9001 standard.
  - 10.2.1.3 The Branch Manager, with the concurrence of the Division Manager, shall be responsible for the development and maintenance of all policies, procedures, work instructions and quality records to ensure the effectiveness of the QMS.



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 52 of 82

## 10.2.2 Control of Documents and Records

10.2.2.1 The Branch Manager shall store and maintain all branch product line related quality documents and records in accordance with AMA-200 policy and procedure regarding the control of documents and records.

# 10.3 Management Responsibility

The AMA-230 Branch Manager is committed to the development and implementation of the QMS and its continual improvement by meeting statutory and regulatory requirements and ensuring that customer requirements are determined and met with the aim of enhancing customer satisfaction.

# 10.3.1 Quality Policy

- 10.3.1.1 The quality policy and objectives of the branch are determined by the Division Management Team, and documented as a quality policy statement. They shall review the quality policy statement at least annually to ensure its relevance to established quality objectives.
- 10.3.1.2 The QMS Quality Policy:
- 10.3.1.2.1 All personnel assigned to the branch will receive training and guidance regarding the meaning of the quality policy statement and will be expected to understand their role within it.

# 10.3.2 Planning

10.3.2.1 The Branch Manager shall ensure that the Division quality objectives, including those needed to meet requirements for each branch product, are established at relevant functions and levels within the branch. Team members will complete all forms following the procedures, work instructions and forms outlined in this manual section.

# 10.3.3 Internal Communications

- 10.3.3.1 The Division Manager and the Branch Manager shall ensure that appropriate communication channels are established within the branch and that communication takes place regarding the effectiveness of the quality system.
- 10.3.3.2 Internal communication and constructive feedback from personnel within the branch shall primarily be through



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 53 of 82

Team meetings. This may also include telephone, email or employee feedback.

10.3.3.3 In order to ensure continuing suitability, adequacy and effectiveness, the Division Manager and the Branch Manager will review the branch portion of the AMA-200 QMS at least annually. The review shall include the assessment of opportunities for improvement and the need for changes, including quality policy and objectives.

# 10.4 Resource Management

## 10.4.1 General

- 10.4.1.1 The Division Manager and the Branch Manager jointly share in the responsibility for the execution of all branch processes.
- 10.4.1.2 The Division Manager shall ensure that the branch is staffed with trained and qualified personnel.

# 10.4.2 Human Resources

- 10.4.2.1 The training objective of the AMA-230 branch is to provide its personnel with knowledge and skills, which, together with experience, improve their effectiveness as an Academy Instructor.
- 10.4.2.2 The branch will maintain minimum qualification standards for all positions. These standards are included in QP 212 and QD 230.
- 10.4.2.3 These qualification standards are highly desirable and meet the requirements of the PAACE-MOU. It is the policy of this branch to identify and provide training needs to all branch personnel performing activities affecting quality.

# 10.4.3 Branch Training Curriculum

- 10.4.3.1 Basic Instructor Training.
- 10.4.3.2 Sharing Instructor Techniques.
- 10.4.3.3 ISO 9001:2000 QMS & Internal Auditing Techniques
- 10.4.3.4 Curriculum Development
- 10.4.3.5 AMA-200 web site
- 10.4.3.6 Instructional Testing



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 54 of 82

- 10.4.3.7 Courses required to meet Field currency in accordance with FAA policy and procedures
- 10.4.4 Currency for Pilots shall be maintained in accordance with FAA Order 4040.9 and en-route currency shall be maintained in accordance with FAA Order 8000.75.
  - 10.4.4.1 Guidance to comply with FAA Order 4040.9 is contained in QP 212.
  - 10.4.4.2 En-route guidance is contained in QP 213.

# 10.5 Product Realization

Planning of Product Realization

- 10.5.1 Planning of Product Realization shall be accomplished in accordance with the AMA-200 process outlined in Section 7 of this manual.
- 10.5.2 Requests for new products or major changes to existing products shall be accomplished in accordance with Section 7.3 of this manual.
- 10.5.3 Classroom processes shall be accomplished following Classroom Instruction Procedures QP 218.
- 10.5.4 The Branch Manager is responsible for the quality control planning for current AMA-230 products.

# 10.6 Measurement, Analysis, and Improvement

# 10.6.1 Customer Satisfaction

- 10.6.1.1 The Branch Manager is responsible for documenting and establishing trends to determine customer satisfaction for the branch. Customer satisfaction shall be determined by using customer feedback from the annual planning meeting, customer audits, emails and phone calls.
- 10.6.1.2 The Branch Manager shall determine the validity of customer complaints. All valid complaints must be captured in a QCAR and forwarded through the Division Manager to the Management Representative by e-mail or as described in an applicable procedure document.

10.6.2 Internal Audits



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 55 of 82

- 10.6.2.1 The Branch Manager shall be responsible for conducting internal quality audits for the following:
- 10.6.2.1.1 At least quarterly, verify the accuracy of the branch QMS and the Website documents.

# 10.6.3 Control of Nonconforming Product

- 10.6.3.1 All branch employees are empowered with the authority and responsibility to report nonconformities at any stage of a process in order to ensure timely detection and disposition of the nonconformities. The branch shall ensure that any product, which does not conform to specific requirements, is identified and controlled to prevent its unintended use or delivery.
- 10.6.3.2 For the remainder of Measurement, Analysis, and Improvement, see Section 8 of this manual.

# 10.7 AMA-230 Documentation

Quality documents required for this section are listed in the AMA-230 documents portion of Appendix 1, Master List of QMS Documents and shall be generated and managed in accordance with the AMA-200 Control of Documents and Records procedure QP 210.

# 11. AIR TRANSPORTATION OPERATIONS BRANCH (AMA-240)

## 11.1 Introduction

The Air Transportation Branch AMA-240 provides standardized, timely, technical reference training to AVS personnel. This is a customer driven program for the use of FAA personnel in support of their job functions. Industry, Military and International may also attend the training. Branch policies, procedures, work instructions, and quality records are formally documented and controlled. Quality System documents are easily accessible and printable from the AMA-200 web site.

Links to branch procedures, work instructions, forms, and other quality documents are contained in the AMA-240 portion of Appendix 1, Master List of QMS Documents

## 11.1.1 Scope

This section applies to products and personnel within the AMA-240 branch. The branch processes include Classroom Instruction, Flight Instruction, Development/ Revision of course material and support of other AMA-200 product lines.

# 11.1.2 Purpose



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 56 of 82

The AMA-240 Team is dedicated to increasing overall performance standards in the instructional process through a comprehensive review process, thereby enhancing the ability to meet or exceed the customer expectations.

This manual provides evidence to all customers and employees that the AMA-240 branch is committed to establishing and maintaining acceptable levels of measurable Quality in its products.

# 11.1.3 Authority

The AMA-240 Manager is authorized to assign personnel to the branch. The branch manager, with the concurrence of the Division Manager, is authorized to implement and maintain the policies and procedures related uniquely to the branch product line.

The branch manager, with the concurrence of the Division Manager, may delegate his/her authority for the branch product line; however, he/she maintains ultimate responsibility.

# 11.2 Quality Management System

# 11.2.1 General

- 11.2.1.1 The AMA-240 quality system is a formal system of controlled and planned activities established for the production of products within its scope. All activities associated with products produced by this branch are governed by procedures and written instructions found in this section.
- 11.2.1.2 The Branch Manager shall establish procedures and documentation that will assure compliance to the quality process. This documentation shall include:
- 1. Documented statements of a quality policy and quality objectives,
- 2. An AMA-240 quality section,
- 3. Documented procedures required by ISO 9001:2000,
- 4. Documents needed by the organization to ensure the effective planning, operation and control of branch processes, and
- 5. Records required by the ISO 9001 standard.
  - 11.2.1.3 The Branch Manager shall be responsible for the development and maintenance of branch policies,



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 57 of 82

procedures, work instructions and quality records to ensure the effectiveness of the QMS.

## 11.2.2 Control of Documents and Records

11.2.2.1 The Branch Manager shall store and maintain branch related quality documents and records in accordance with AMA-200 policy and procedure regarding the control of documents and records.

# 11.3 Management Responsibility

The Branch Manager is committed to the development and implementation of the QMS and its continual improvement by meeting statutory and regulatory requirements and ensuring that customer requirements are determined and met with the aim of enhancing customer satisfaction.

# 11.3.1 Quality Policy

11.3.1.1 All personnel assigned to this branch will receive training and guidance regarding the meaning of the Division quality policy statement and will be expected to understand their role within it.

# 11.3.2 Planning

11.3.2.1 The Branch Manager shall ensure that quality objectives, including those needed to meet requirements for each branch product, are established at relevant functions and levels within the AMA-240 branch. Branch members will complete all forms following the procedures, work instructions and forms outlined in this Section.

## 11.3.3 Internal Communications

- 11.3.3.1 The Division Manager and the Branch Manager shall ensure that appropriate communication channels are established within the branch and that communication takes place regarding the effectiveness of the quality system.
- 11.3.3.2 Internal communication and constructive feedback from personnel within the branch shall primarily be through team meetings. This may also include telephone, email or employee feedback.

# 11.3.4 Management Review



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 58 of 82

11.3.4.1 In order to ensure continuing suitability, adequacy and effectiveness, the Branch Manager will review the branch portion of the AMA-200 QMS at least annually. The review shall include the assessment of opportunities for improvement and the need for changes, including quality policy and objectives.

# 11.4 Resource Management

## 11.4.1 General

- 11.4.1.1 The Division Manager and the Branch Manager jointly share in the responsibility for the execution of all AMA-240 processes.
- 11.4.1.2 The Division Manager shall ensure that the branch is staffed with trained and qualified personnel.

## 11.4.2 Human Resources

- 11.4.2.1 The training objective of the branch is to provide its personnel with knowledge and skills, which, together with experience, improve their effectiveness as an Academy Instructor.
- 11.4.2.2 The branch will maintain minimum qualification standards for all positions.
- 11.4.2.3 These qualification standards are highly desirable and meet the requirements of the PAACE MOU.

## 11.4.3 Branch Training Curriculum

- 11.4.3.1 Basic Instructor Training.
- 11.4.3.2 Sharing Instructor Techniques.
- 11.4.3.3 ISO 9001:2000 QMS & Internal Auditing Techniques
- 11.4.3.4 Curriculum Development
- 11.4.3.5 AMA-200 web site:
- 11.4.3.6 Instructional Testing
- 11.4.3.7 Courses required to meet Field currency in accordance with FAA policy and procedures



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 59 of 82

- 11.4.4 Currency for Pilots shall be maintained in accordance with FAA order 4040.9 and en-route currency shall be maintained in accordance with FAA Order 8000.75.
  - 11.4.4.1 Guidance to comply with FAA Order 4040.9 is contained in QP 212.
  - 11.4.4.2 En-route guidance is contained in QP 213.

# 11.5 Product Realization

11.5.1 Planning of Product Realization

Planning of Product Realization shall be accomplished in accordance with the AMA-200 process outlined in Section 7 of this manual.

- 11.5.2 Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual
- 11.5.3 Classroom processes shall be accomplished following Classroom Instruction Procedures QP 218.
- 11.5.4 The Branch Manager is responsible for the quality control planning for current branch products.

# 11.6 Measurement, Analysis, and Improvement

## 11.6.1 Customer Satisfaction

- 11.6.1.1 The Branch Manager is responsible for documenting and establishing trends to determine customer satisfaction for the branch. Customer satisfaction shall be determined by using customer feedback from customer audits, emails, annual planning meeting.
- 11.6.1.2 The Branch Manager shall determine the validity of customer complaints. All valid complaints must be captured in a QCAR and forwarded through the Division Manager to the Management Representative by e-mail or as described in an applicable procedure document.

## 11.6.2 Internal Audits

- 11.6.2.1 The Branch Manager shall be responsible for conducting internal branch quality audits for the following:
- 11.6.2.1.1 At least quarterly, verify the accuracy of the branch procedures, policies and QMS documents.



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 60 of 82

# 11.6.3 Control of Nonconforming Product

- 11.6.3.1 All branch employees are empowered with the authority and responsibility to report nonconformities at any stage of a process in order to ensure timely detection and disposition of the nonconformities. The branch shall ensure that any product, which does not conform to specific requirements, is identified and controlled to prevent its unintended use or delivery.
- 11.6.3.2 For the remainder of Measurement, Analysis, and Improvement, see Section 8 of this manual.

# 11.7 AMA-240 Documentation

Quality documents required for this section are listed in the AMA 240 portion of Appendix 1, Master List of QMS Documents and shall be generated and managed in accordance with the AMA-200 Control of Documents and Records procedure QP 210.

# 12. AIRWORTHINESS BRANCH (AMA-250)

# **12.1 Introduction**

The Airworthiness Branch provides standardized, timely, technical reference training to AVS personnel. This is a customer driven program for the use of FAA personnel in support of their job functions. Industry, Military and International may also attend the training. Branch policies, procedures, work instructions, and quality records are formally documented and controlled. Quality System documents for AMA-250 are easily accessible and printable from the AMA-200 web site.

Links to branch procedures, work instructions, forms, and other quality documents are contained in the AMA-250 portion of Appendix 1, Master List of QMS Documents

# 12.1.1 Scope

This section applies to products and personnel within the Airworthiness branch. The branch processes include Classroom Instruction, Laboratory Instruction, Development/ Revision of course material and support of other AMA-200 product lines.

# 12.1.2 Purpose

The AMA-250 branch is dedicated to increasing overall performance standards in the instructional process through a comprehensive review process, thereby enhancing the ability to meet or exceed the customer expectations.



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 61 of 82

This manual provides evidence to all customers and employees that the branch is committed to establishing and maintaining acceptable levels of measurable Quality in its products.

# 12.1.3 Authority

The AMA 250 Manager is authorized to assign personnel to the branch. The branch manager is authorized to implement and maintain the policies and procedures related uniquely to the branch product line.

The branch manager may delegate his/her authority for the branch product line; however, he/she maintains ultimate responsibility.

# 12.2 Terms, Definitions and Acronyms

See Section 3

# 12.3 Quality Management System

### 12.3.1 General

- 12.3.1.1 The Airworthiness quality system is a formal system of controlled and planned activities established for the production of products within its scope. All activities associated with products produced by the branch are governed by procedures and written instructions found in this section.
- 12.3.1.2 The Branch Manager shall establish procedures and documentation that will assure compliance to the quality process. This documentation shall include:
- 6. Documented statements of a quality policy and quality objectives,
- 7. An Airworthiness QA section,
- 8. Documented procedures required by ISO 9001:2000,
- 9. Documents needed by the organization to ensure the effective planning, operation and control of branch processes, and
- 10. Records required by the ISO 9001 standard.
  - 12.3.1.3 The Airworthiness Branch Manager shall be responsible for the development and maintenance of all branch policies, procedures, work instructions and quality records to ensure the effectiveness of the QMS.

## 12.3.2 Control of Documents and Records



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 62 of 82

12.3.2.1 The Airworthiness Manager shall store and maintain branch product line related quality documents and records in accordance with AMA-200 policy and procedure regarding the control of documents and records.

# 12.4 Management Responsibility

The Airworthiness Branch Manager is committed to the development and implementation of the QMS and its continual improvement by meeting statutory and regulatory requirements and ensuring that customer requirements are determined and met with the aim of enhancing customer satisfaction.

# 12.4.1 Quality Policy

12.4.1.1 All personnel assigned to the branch will receive training and guidance regarding the meaning of the quality policy statement and will be expected to understand their role within it.

# 12.4.2 Planning

12.4.2.1 The Airworthiness Branch Manager shall ensure that quality objectives, including those needed to meet requirements for each branch product that's established at relevant functions and levels within the branch. Branch members will complete all forms following the procedures, work instructions and forms outlined in this Section.

## 12.4.3 Internal Communications

- 12.4.3.1 The Division Manager shall ensure that appropriate communication channels are established within the Airworthiness branch and that communication takes place regarding the effectiveness of the quality system.
- 12.4.3.2 Internal communication may be in the form of Management or Team Member-led meetings and/or briefings. These meetings or briefings could include teleconferences (telecoms).
- 12.4.3.3 Internal communication and constructive feedback from personnel within the branch shall primarily be through telecommunications. This may include telephone, email or employee feedback.

# 12.4.4 Management Review



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 63 of 82

12.4.4.1 In order to ensure continuing suitability, adequacy and effectiveness, the Division Manager and the Airworthiness Branch Manager will review AMA-250 portion of the AMA-200 QMS at least annually. The review shall include the assessment of opportunities for improvement and the need for changes, including quality policy and objectives.

# 12.5 Resource Management

## 12.5.1 General

- 12.5.1.1 The Division Manager and the Branch Manager jointly share in the responsibility for the execution of all branch processes.
- 12.5.1.2 The Division Manager shall ensure that the branch is staffed with trained and qualified personnel.

## 12.5.2 Human Resources

- 12.5.2.1 The training objective of the AB is to provide its personnel with knowledge and skills, which, together with experience, improve their effectiveness as an Academy Instructor.
- 12.5.2.2 The branch will maintain minimum qualification standards for all positions. These standards are included in QD 250.
- 12.5.2.3 These qualification standards are highly desirable and meet the requirements of the PAACE MOU. It is the policy of the branch to identify and provide training needs to all branch personnel performing activities affecting quality.

# 12.5.3 Branch Training Curriculum

- 12.5.3.1 Basic Instructor Training.
- 12.5.3.2 Sharing Instructor Techniques.
- 12.5.3.3 ISO 9001:2000 QMS & Internal Auditing Techniques
- 12.5.3.4 Curriculum Development
- 12.5.3.5 Airworthiness Quality Procedures, Quality Forms and Quality Documents
- 12.5.3.6 AMA-200 web site.



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 64 of 82

- 12.5.4 En-route currency shall be maintained in accordance with FAA Order 8000.75.
  - 12.5.4.1 En-route guidance is contained in QP 213.

## 12.6 Product Realization

12.6.1 Planning of Product Realization

Planning of Product Realization shall be accomplished in accordance with the AMA-200 process outlined in Section 7 of this manual.

- 12.6.2 Requests for new products or major changes to existing products shall be accomplished in accordance with section 7 of this manual
- 12.6.3 Classroom processes shall be accomplished following Classroom Instructions Procedures QP 218.
- 12.6.4 The Branch Manager is responsible for the quality control planning for current branch products.

# 12.7 Measurement, Analysis, and Improvement

- 12.7.1 Customer Satisfaction
  - 12.7.1.1 The Branch Manager is responsible for documenting and establishing trends to determine customer satisfaction for the branch. Customer satisfaction shall be determined by using customer feedback from the annual planning meeting, e-mails, phone calls and customer audits.
  - 12.7.1.2 The Branch Manager shall determine the validity of customer complaints. All valid complaints must be captured in a QCAR and forwarded through the Division Manager to the Management Representative by e-mail or as described in an applicable procedure document.
- 12.7.2 Internal Audits
  - 12.7.2.1 The Branch Manager, with the concurrence of the Division Manager, shall be responsible for conducting informal quality audits for the following:
  - 12.7.2.1.1 At least quarterly, verify the accuracy of the AMA-250 QMS procedures and policy documents.
- 12.7.3 Control of Nonconforming Product



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 65 of 82

- 12.7.3.1 All branch employees are empowered with the authority and responsibility to report nonconformities at any stage of a process in order to ensure timely detection and disposition of the nonconformities. The branch shall ensure that any product, which does not conform to specific requirements, is identified and controlled to prevent its unintended use or delivery.
- 12.7.3.2 For the remainder of Measurement, Analysis, and Improvement, see Section 8 of this manual.

# 12.8 Documentation

Quality documents required for this section are listed in the AMA-250 portion of Appendix 1, Master List Of QMS Documents and shall be generated and managed in accordance with the AMA-200 Control of Documents and Records procedure QP 210.

# 13. CONTRACTS AND PROGRAM ADMINISTRATION BRANCH AMA-260

# 13.1 Introduction

The Contracts and Program Administration Branch AMA-260 obtains standardized, timely, technical reference training to AVS personnel and program assistance to the Division along with customer related product support. This is a customer driven program for the use of FAA personnel in support of their job functions. The Contracts and Program Administration Branch also provides support in classroom space assignment, quota management, COTR functions and presentation material acquisition. The Branch uses sub-teams to accomplish these functions. Branch policies, procedures, work instructions, and quality records are formally documented and controlled. Quality System documents for AMA-260 branch are easily accessible and printable from the AMA-200 web site.

Links to AMA-260 procedures, work instructions, forms, and other quality documents are contained in the AMA-260 Documents portion of Appendix 1, Master List of QMS Documents

# 13.1.1 Scope

This section applies to products and personnel within the branch. The AMA-260 processes include Out-of-Agency Flight Training Acquisition, Non-Flight, Out-of-Agency training Acquisition, Quota Management, Simulator Maintenance and COTR Process requirements.

# 13.1.2 Purpose



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 66 of 82

The AMA-260 Branch is dedicated to increasing overall performance standards in the acquisition process through a comprehensive review process, thereby enhancing the ability to meet or exceed the customer expectations.

This manual provides evidence to all customers and employees that the AMA-260 is committed to establishing and maintaining acceptable levels of measurable Quality in its products.

# 13.1.3 Authority

The AMA 260 Manager is authorized to assign personnel to the branch. The branch Manager is authorized to implement and maintain the policies and procedures related uniquely to the branch product line.

The Manager may delegate his/her authority for the branch product line; however, he/she maintains ultimate responsibility.

# 13.2 Terms, Definitions and Acronyms

COTR

Contract Officers Technical Representative

# 13.3 Quality Management System

### 13.3.1 General

- 13.3.1.1 The AMA-260 QMS is a formal system of controlled and planned activities established for the production of products within its scope. All activities associated with products produced by this branch are governed by procedures and written instructions found in this section.
- 13.3.1.2 The Branch Manager shall establish procedures and documentation that will assure compliance to the quality process. This documentation shall include:
- 1. Documented statements of a quality policy and quality objectives,
- 2. An AMA-260 quality section,
- 3. Documented procedures required by ISO 9001:2000,
- 4. Documents needed by the organization to ensure the effective planning, operation and control of branch processes, and
- 5. Records required by the ISO 9001 standard.
  - 13.3.1.3 The Branch Manager shall be responsible for the development and maintenance of branch policies,



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 67 of 82

procedures, work instructions and quality records to ensure the effectiveness of the QMS.

## 13.3.2 Control of Documents and Records

13.3.2.1 The Branch Manager shall store and maintain all branch product line related quality documents and records in accordance with AMA-200 policy and procedure regarding the control of documents and records.

# 13.4 Management Responsibility

The Branch Manager shall ensure that customer requirements are determined and met with the aim of enhancing customer satisfaction.

# 13.4.1 Quality Policy

13.4.1.1 All personnel assigned to the AMA-260 branch will receive training and guidance regarding the meaning of the quality policy statement and will be expected to understand their role within it.

# 13.4.2 Planning

13.4.2.1 The Branch Manager shall ensure that quality objectives, including those needed to meet requirements for each branch product, are established at relevant functions and levels within the AMA-260 branch. Branch members will complete all forms following the procedures, work instructions and forms outlined in this Section.

## 13.4.3 Internal Communications

- 13.4.3.1 The Division Manager and the Branch Manager shall ensure that appropriate communication channels are established within the branch and that communication takes place regarding the effectiveness of the quality system.
- 13.4.3.2 Internal communication may be in the form of Management or Team Member-led meetings and/or briefings. These meetings or briefings could include teleconferences (telecoms).
- 13.4.3.3 Internal communication and constructive feedback from personnel within the branch shall primarily be through Team meeting but also may include telephone, email or employee feedback available.



Document #
QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 68 of 82

# 13.4.4 Management Review

13.4.4.1 In order to ensure continuing suitability, adequacy and effectiveness, the Division Manager and the Branch Manager will review the branch portion of the AMA-200 QMS at least annually. The review shall include the assessment of opportunities for improvement and the need for changes, including quality policy and objectives.

# 13.5 Resource Management

### 13.5.1 General

- 13.5.1.1 The Division Manager and the Branch Manager jointly share in the responsibility for the execution of all branch processes.
- 13.5.1.2 The Division Manager shall ensure that the branch is staffed with trained and qualified personnel.

### 13.5.2 Human Resources

- 13.5.2.1 The training objective of the branch is to provide its personnel with knowledge and skills, which, together with experience, improve their effectiveness as an Academy Personnel.
- 13.5.2.2 The branch will maintain minimum qualification standards for all positions. These standards are included in QD 260, Minimum Qualification Standards.
- 13.5.2.3 It is the policy of the AMA-260 branch to identify and provide training needs to all branch personnel performing activities affecting quality.

# 13.5.3 AMA-260 Training Curriculum

- 13.5.3.1 Initial COTR Training (If required)
- 13.5.3.2 Recurrent COTR Training (if required).
- 13.5.3.3 ISO 9001:2000 QMS & Internal Auditing Techniques
- 13.5.3.4 QMS Quality Procedures, Quality Forms and Quality Documents
- 13.5.3.5 AMA-200 web site



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 69 of 82

# 13.6 Product Realization

# 13.6.1 Planning of Product Realization

Planning of Product Realization shall be accomplished in accordance with the AMA-200 process outlined in this section of this manual.

- 13.6.1.1 Non-Flight Out-Of-Agency Training QP 262)
- 13.6.1.2 Flight Training Out-Of Agency Acquisition Process QP 263
- 13.6.1.3 Quota Management QP 264
- 13.6.1.4 COTR Process QP 265
- 13.6.1.5 Presentation Materials Acquisition QP 266)
- 13.6.1.6 Space Management Process QP 267)
- 13.6.2 Requests for new products or major changes to existing products shall be accomplished in accordance with Section 7 of this manual
- 13.6.3 The Branch Manager is responsible for the quality control planning for current branch products.

# 13.7 Measurement, Analysis, and Improvement

### 13.7.1 Customer Satisfaction

- 13.7.1.1 The Branch Manager is responsible for documenting and establishing trends to determine customer satisfaction for the branch. Customer satisfaction shall be determined by using customer feedback from the annual planning meeting, e-mails, phone calls and customer audits.
- 13.7.1.2 The Branch Manager shall determine the validity of customer complaints. All valid complaints must be captured in a QCAR and forwarded through the Division Manager to the Management Representative by e-mail or as described in an applicable procedure document.

## 13.7.2 Internal Audits

- 13.7.2.1 The Branch Manager shall be responsible for conducting internal quality audits for the following:
- 13.7.2.1.1 At least quarterly, verify the accuracy of the AMA-260 process, procedures, policy and documentation.
- 13.7.3 Control of Nonconforming Product

| Title:   | AMA - 200 Quality Manual      |            | Page 70 of 82 |
|--|-------------------------------|------------|---------------|
| The state of the s | Regulatory Standards Division | QMS 200    | #21           |
| (NEGULATORY STANDARDS  |                               | Document # | Revision      |

13.7.3.1 All branch employees are empowered with the authority and responsibility to report nonconformities at any stage of a process in order to ensure timely detection and disposition of the nonconformities. The branch shall ensure that any product, which does not conform to specific requirements, is identified and controlled to prevent its unintended use or delivery.

13.7.3.2 For the remainder of Measurement, Analysis, and Improvement, see Section 8 of this manual.

# 13.8 Documentation

Quality documents required for this section are listed in the AMA-260 portion of Appendix 1, Master List Of QMS Documents and shall be generated and managed in accordance with the AMA-200 Control of Documents and Records procedure QP 210.

# **APPENDIX 1: MASTER LIST OF QMS DOCUMENTS**

| AMA-200 Documents                          | Document<br>Number | Revision<br>Status |
|--|--------------------|--------------------|
| AMA-200 Manuals                            |                    |                    |
| Quality Manual                             | QMS 200            | 20                 |
| System Level Procedures                    |                    |                    |
| Internal Audit Procedure (IAP)             | QP 205             | Original           |
| Control of Documents and Records           | QP 210             | 1                  |
| Management Review Procedure                | QP 211             | Original           |
| Product Development Procedure              | QP 214             | 1                  |
| Corrective and Preventive Action Procedure | QP 217             | 1                  |
| Control of Nonconforming Product Procedure | QP 208             | Original           |



Title:

# **Regulatory Standards Division**

AMA - 200 Quality Manual

Document #

Revision #21

**QMS 200** 

Page 71 of 82

| AMA-200 Documents                                   | Document<br>Number | Revision<br>Status |
|---|--------------------|--------------------|
| Classroom Procedures                                | QP 218             | Original           |
| System Level Work Instruction                       | าร                 |                    |
| Document Control Administrator Work Instruction     | WI 210.01          | Original           |
| Product Development Planning Work Instruction       | WI 214.02          | 1                  |
| Product Development Plan Execution Work Instruction | WI 214.03          | 1                  |
| Plan Change Request Work Instruction                | WI 214.04          | 1                  |
| Quality Corrective Action Request Work Instruction  | WI 217.01          | Original           |

|  | System Level Forms              |                    |                    |  |
|--|---------------------------------|--------------------|--------------------|--|
| Document Cha                                     | inge Request                    | QF 210             | Original           |  |
| Management F                                     | Review Checklist                | QF 211.01          | Original           |  |
| Customer Req                                     | uest Information Document       | QF 214             | Original           |  |
| QMS Risk Worksheet                               |                                 | QF 214.03          | Original           |  |
| Plan Change Request                              |                                 | QF 214.04          | Original           |  |
| Quality Corrective Action Request (QCAR)         |                                 | QF 217             | 1                  |  |
| Click Icons for Word or Adobe  AMA-220 Documents |                                 | Document<br>Number | Revision<br>Status |  |
|  |                                 |                    |                    |  |
| Minimum Emp                                      | loyee Qualification Requirement | QD 220             | Original           |  |

| REGULATORY STANDARDS | Regulatory Standards Division | Document # QMS 200 | Revision<br>#21 |
|----------------------|-------------------------------|--------------------|-----------------|
| Title:               | AMA - 200 Quality Manual      |                    | Page 72 of 82   |

| Distance Learning Procedures      |  | QP 220             | Original           |
|-----------------------------------|--|--------------------|--------------------|
| AMA-230 Documents                 |  | Document<br>Number | Revision<br>Status |
|                                   |  |                    |                    |
| Flight Program Management Process |  | QP 212             | Original           |
| Cockpit/Cabin En Route            |  | QP 213             | #1                 |

|                                   | AMA-240 Documents | Document<br>Number | Revision<br>Status |
|-----------------------------------|-------------------|--------------------|--------------------|
|                                   |                   |                    |                    |
| Flight Program Management Process |                   | QP 212             | Original           |
| Cockpit/Cabin En Route            |                   | QP 213             | #1                 |
|                                   |                   |                    |                    |

|                        | AMA-250 Documents | Document<br>Number | Revision<br>Status |
|------------------------|-------------------|--------------------|--------------------|
|                        |                   |                    |                    |
| Cockpit/Cabin En Route |                   | QP 213             | А                  |

| AMA-260 Documents | Document<br>Number | Revision<br>Status |
|-------------------|--------------------|--------------------|
|                   |                    |                    |



Document # QMS 200

Revision #21

Title: AMA - 200 Quality Manual

Page 73 of 82

|  | AMA-260 Documents              | Document<br>Number | Revision<br>Status |
|--|--------------------------------|--------------------|--------------------|
|  |                                |                    | Otatas             |
| Contract Revis                                 | ion and Development Procedures | QP 260             | Original           |
| Non-Flight Out                                 | of Agency Training Acquisition | QP 262             | Original           |
| Out of Agency                                  | Flight Training Acquisition    | QP 263             | Original           |
| Quota Management Process                       |                                | QP 264             | Original           |
| Contracting Officer's Technical Representative |                                | QP 265             | Original           |
| Presentation Materials Acquisition             |                                | QP 266             | Original           |
| Space Management Process                       |                                | QP 267             | Original           |
| AMA-260 Forms                                  |                                |                    |                    |
| Contractor Revision or Development Request     |                                | QF 260.01          | Original           |
| Contractor Instructional Request               |                                | QF 260.02          | Original           |



Document #
QMS 200

Revision

#21

Title:

**AMA - 200 Quality Manual** 

Page 74 of 82

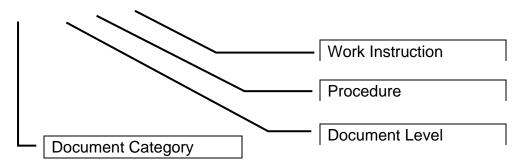
# **APPENDIX 2: AMA-200 Document Control Index System**

All AMA-200 QMS documents relating to all branch processes are uniquely identified. Documents may be retrieved from the AMA-200 Quality Management System Web site at <a href="http://www.academy.faa.gov/ama200/QMS.htm">http://www.academy.faa.gov/ama200/QMS.htm</a>.

The Document Number can be found in the header of each document as well as in the Master Document Index. AMA-200 Documents are identified in the following categories:

- QMS Quality Manual
- QP Quality Procedure
- WI Work Instructions
- QF Quality Forms
- QD Any other quality documents

# WI 1 13 .01



The alpha document designation is followed by a series of numbers and is also unique for each document category. The first number following the category identifies whether the document is a System Level or Specific Product Line Level document. The second and third number identifies that the document is a Procedure document and appropriately sequenced by the Document Control Administrator. The decimal number identifies the Work Instruction Related to the Procedure.



Document #
QMS 200

Revision

**#21** 

Title:

AMA - 200 Quality Manual

Page 75 of 82

# **APPENDIX 3: MASTER LIST OF QMS RECORDS**

| Record Name  | Location  | Minimum<br>Retention | Disposition                    |  |
|--|---|----------------------|--------------------------------|--|
| AMA-200 Records                                      |   |                      |                                |  |
| Quality Manual QMS<br>200                            | http://www.academy.<br>faa.gov/ama200/QM<br>S.htm | Until Superseded     | Delete from<br>Database        |  |
| Internal Audit (ISO 8.2.2) Procedure QP 205          |   |                      |                                |  |
| Audit Plan QF 205.01                                 | Management Rep                                    | 5 years              | Delete from<br>Database        |  |
| Audit Schedule                                       | Management Rep                                    | 5 years              | Delete from<br>Database        |  |
| IQA Findings/Observations<br>Form QF 205.02          | Management Rep                                    | 5 years              | Shred and Delete from Database |  |
| Completed Audit QCAR<br>QF 217                       | Management Rep                                    | 5 years              | Shred and Delete from Database |  |
| Final Audit Report                                   | Management Rep                                    | 5 years              | Shred and Delete from Database |  |
| Completed Audit<br>Checklists                        | Management Rep                                    | 5 years              | Shred and Delete from Database |  |
| List of Qualified Auditors                           | Management Rep                                    | Until Superseded     | Shred and Delete from Database |  |
| Control of Documents and Records QP 210              |   |                      |                                |  |
| Completed Document<br>Change Request (DCR)<br>QF 210 | Management Rep                                    | 5 years              | Shred                          |  |
| Master List of Documents (Appendix 1)                | AMA-200 Website                                   | Until Superseded     | Deleted                        |  |
|  |   |                      |                                |  |



Title:

# **Regulatory Standards Division**

AMA - 200 Quality Manual

Document #
QMS 200

Revision

**#21** 

Page 76 of 82

| Record Name   | Location        | Minimum<br>Retention | Disposition                    |
|---|-----------------|----------------------|--------------------------------|
| Control of Records<br>Procedures QP 209                               |                 |                      | -                              |
| Master List of Records (Appendix 3)                                   | AMA-200 Website | Until Superseded     | Deleted                        |
|   |                 |                      |                                |
| Management Review (ISO 5.6.1) Procedure QP 211                        |                 |                      |                                |
| Minutes of Management Review Meetings                                 | Management Rep  | 5 years              | Shred and Delete from Database |
| Management Review<br>Checklist QF 211.01                              | Management Rep  | 5 years              | Shred and Delete from Database |
|   |                 |                      |                                |
| Corrective and Preventive Action Procedure (ISO 8.5.2 & 8.5.3) QP 217 |                 |                      |                                |
| Completed Corrective<br>Action QCARs QF 217                           | Management Rep  | 5 years              | Shred and Delete from Database |
| QCAR List – Corrective<br>Action                                      | Management Rep  | 5 years              | Shred and Delete from Database |
| Completed Preventive<br>Action QCARs QF 217                           | Management Rep  | 5 years              | Shred and Delete from Database |
| QPAR List - Preventive Action   | Management Rep  | 5 years              | Shred and Delete from Database |
|   |                 |                      |                                |
| Control of<br>Nonconforming<br>Product (ISO 8.3)<br>Procedure QP 208  |                 |                      |                                |



Document # QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 77 of 82

| Record Name  | Location                                     | Minimum<br>Retention                | Disposition                    |
|--|--|-------------------------------------|--------------------------------|
| Completed QCARs QF 217   | Management<br>Rep                            | 5 Years                             | Shred and Delete from Database |
| Customer Acceptance<br>Statement (on customer's<br>Letterhead) | Management<br>Rep                            | Life of<br>Product                  | Shred                          |
| Risk Worksheet QF 214.03                                       | Product Branch<br>Manager                    | Life of<br>Product                  | Shred                          |
|  |  |                                     |                                |
| Product Development<br>Procedure QP 214                        |  |                                     |                                |
| Final Report:<br>(See QP 214                                   | Project Coordinator                          | Life of Product or until Superseded | Shred or Delete from Database  |
| Risk Worksheet QF 214.03                                       | Project Coordinator                          | Life of Product or until Superseded | Shred or Delete from Database  |
|  |  |                                     |                                |
| Customer Related<br>Processes Records<br>(ISO 6.2.2)           |  |                                     |                                |
| Customer Request<br>Information Document QF<br>214             | Project Coordinator or completed master file | Life of Product or until Superseded | Shred or Delete from Database  |
| Design Records (ISO 7.3)                                       |  |                                     |                                |
| QF 214   | Project Coordinator or completed master file | Life of Product or until superseded | Shred or Delete from Database  |
| Design Input (ISO 7.3.2)                                       |  |                                     |                                |
| Customer Request<br>Information Document QF<br>214             | Project Coordinator or completed master file | Life of Product or until superseded | Shred or Delete from Database  |



Document # QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 78 of 82

| Record Name  | Location                       | Minimum<br>Retention | Disposition                   |
|--|--------------------------------|----------------------|-------------------------------|
| Design Review (ISO 7.3.4)                          |                                |                      |                               |
| QF 214   | Branch/Course<br>Master file   | Life of Product      | Shred or Delete from Database |
| Design Verification (ISO 7.3.5)                    | Academy Guidelines             |                      |                               |
|  | Branch/Course<br>Master file   | Life of Product      | Shred or Delete from Database |
| Design Validation (ISO 7.3.6)                      | Academy Guidelines             |                      |                               |
|  | Branch/Course<br>Master file   | Life of Product      | Shred or Delete from Database |
| Design Changes (ISO 7.3.7)                         |                                |                      |                               |
| Plan Change Request (QF 214.04)                    | Branch Files                   | Life of Product      | Shred or Delete from Database |
| QCAR (QF 217)                                      | Management<br>Rep/Branch Files | 3 years              | Shred                         |
| Supplier Records (ISO 7.4.1)                       |                                |                      |                               |
| Approved Supplier List                             | AMQ                            |                      |                               |
| Purchasing Documents                               | Product Branch<br>Manager      | 3 years              | Shred                         |
| Validation of Special<br>Processes (ISO<br>7.5.2d) | See Exclusions                 |                      |                               |
| Product ID and<br>Traceability (ISO<br>7.5.3)      | AMA-200 "W" Drive              |                      |                               |



Document # QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 79 of 82

| Record Name   | Location   | Minimum<br>Retention               | Disposition                   |
|---|--|------------------------------------|-------------------------------|
|   | AMA-200 "W" Drive  | Life of Product                    | Delete or Shred from Database |
| Customer property (ISO 7.5.4)                                 | Justified Exclusion.<br>See Section 2 of the<br>AMA Quality Manual |                                    |                               |
| Calibration Records (ISO 7.6a)                                | No Records see exclusions  |                                    |                               |
| Monitoring and Measurement of the Product Records (ISO 8.2.4) | Academy Guidelines   |                                    |                               |
|   | Branch office or course master file                                | Life of Product                    | Shred or Delete from database |
| Production Records  |  |                                    |                               |
| Product Development<br>Planning                               | Branch office or course master file                                | Life of Product                    | Shred or Delete from database |
| Product Development Plan Execution                            | Branch office or course master file                                | Life of Product                    | Shred or Delete from database |
| Plan Change Request Work Instruction                          | Branch office or course master file                                | Life of Product                    | Shred or Delete from database |
| Quality Corrective Action Request                             | Branch office or course master file                                | Life of Product                    | Shred or Delete from database |
| Education, Training,<br>Skills and Experience<br>Records      |  |                                    |                               |
| CPMIS (Electronic<br>Records)                                 | AMH-200  | Length of employment plus 10 years | Deleted                       |
| Branch Records  | Branch Office  | Length of employment               | Shredded                      |



Title:

# **Regulatory Standards Division**

Document # QMS 200

Revision

#21

AMA - 200 Quality Manual

Page 80 of 82

| Record Name                                   | Location          | Minimum<br>Retention      | Disposition |  |
|---|-------------------|---------------------------|-------------|--|
| Aircraft Certification Branch AMA-220 Records |                   |                           |             |  |
| Class Roster                                  | Class File        | 5 Years                   | Shred       |  |
| CPMIS Changes                                 | Class File        | 5 Years                   | Shred       |  |
| Industry Student Payments                     | Class File        | 6 Years 3<br>months       | Shred       |  |
| Student Information Sheet                     | Class File        | 5 Years                   | Shred       |  |
| Course<br>Description/updates                 | Course File       | Indefinite                | Destroy     |  |
| Course Profile                                | Course File       | Indefinite                | Destroy     |  |
| Print Requests                                | Branch Office     | 1 Year                    | Destroy     |  |
| Branch Team Meetings                          | Branch Office     | Current year +2<br>Years  | Destroy     |  |
| Commercial Tra                                | insportation Bran | ch AMA-230 F              | Records     |  |
| Class Roster                                  | Branch Office     | 5 Years                   | Shred       |  |
| Property Receipts                             | Branch Office     | 10 Years                  | Shred       |  |
| Travel Vouchers/ Orders                       | Branch Office     | 2 Years                   | Destroy     |  |
| Purchase Requests                             | Branch Office     | 10 Years                  | Destroy     |  |
| Branch Team Meetings                          | Branch Office     | Current year + 2<br>Years | Destroy     |  |
| Employee Training                             | Branch Office     | Tenure + 2yrs             | Destroy     |  |
| Pilot Flight Records                          | Branch Office     | 3 Years                   | Shred       |  |



Document # QMS 200

Revision

#21

Title:

AMA - 200 Quality Manual

Page 81 of 82

| Record Name  | Location                           | Minimum<br>Retention   | Disposition |  |
|--|------------------------------------|------------------------|-------------|--|
| Air Transportation Operations Branch AMA-240 Records |                                    |                        |             |  |
| Staff Meetings                                       | Branch Office                      | Current Year +2<br>yrs | Shred       |  |
| Travel and Transportation                            | Branch Office                      | 2 yrs                  | Shred       |  |
| Property Records                                     | Property Delegate<br>Branch Office | Expiration             | Shred       |  |
| Industry Class Receipts                              | Branch Office                      | 2 yrs                  | Shred       |  |
| Time and Attendance                                  | Branch Office                      | 1 yr                   | Shred       |  |
| Procurement Requests                                 | Branch Office                      | 5 years                | Shred       |  |
| Airworthiness Branch AMA-250 Records                 |                                    |                        |             |  |
| Class Roster   | Branch Office                      | 5 Years                | Shred       |  |
| CPMIS Changes  | Branch Office                      | 5 Years                | Shred       |  |
| Industry Student Payments                            | Branch Office                      | 6 Years 3 months       | Shred       |  |
| Student Information Sheet                            | Branch Office                      | 5 Years                | Shred       |  |
| Course<br>Description/updates                        | Branch Office                      | Indefinite             |             |  |
| Course Profile                                       | Branch Office                      | Indefinite             |             |  |
| Property Data  | Branch Office                      | Until excessed         | Shred       |  |
| Property Receipts                                    | Branch Office                      | 10 Years               | Shred       |  |
| Travel Vouchers/Orders                               | Branch Office                      | 2 Years                | Destroy     |  |



Document # QMS 200

Revision

#21

Title: AMA - 200 Quality Manual

Page 82 of 82

| Record Name                   | Location  | Minimum<br>Retention      | Disposition |  |  |
|-------------------------------|---|---------------------------|-------------|--|--|
| Purchase requests             | Branch Office   | 10 Years                  | Destroy     |  |  |
| Print Requests                | Branch Office   | 1 Years                   | Destroy     |  |  |
| Branch Team Meetings          | Branch Office   | Current year + 2<br>Years | Destroy     |  |  |
| Contracts and Pr              | Contracts and Program Administration Branch AMA-260 Records |                           |             |  |  |
| Class Roster                  | CPMIS   | 5 Years                   | Destroy     |  |  |
| CPMIS Changes                 | CPMIS   | 5 Years                   | Destroy     |  |  |
| Course<br>Description/updates | CPMIS   | Indefinite                |             |  |  |
| Course Profile                | CPMIS   | Indefinite                |             |  |  |
| Property Data                 | Branch Office   | 10 Years                  | Shred       |  |  |
| Property Receipts             | Branch Office   | 10 Years                  | Shred       |  |  |
| Travel Orders/Vouchers        | Branch Office   | 2 Years                   | Destroy     |  |  |
| Purchase Requests             | Branch Office   | 10 Years                  | Destroy     |  |  |
| Branch Team Meeting           | Branch Office   | Current year + 2<br>Years | Destroy     |  |  |
| QF260.01                      | Branch Office   | 2 Years                   | Shred       |  |  |
| QF 260.02                     | Branch Office   | 2 Years                   | Shred       |  |  |